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ABSTRACT

This lengthy resource book for kindergarten teachers in Mississippi includes 20 substantive chapters. After brief statements of program philosophy and goals, chapters focus respectively on: (1) various roles of school staff members in the implementation of the kindergarten program; (2) characteristics of children 4 to 6 years of age including those with special needs; (3) a learning center approach to structuring the indoor environment and criteria for the playground; (4) curriculum planning and design; (5) equipment and materials for learning centers; (6) guidelines for program assessment; (7) parents in the learning process; (8) definition of terms; (9) curriculum activities; (10) cooking in the kindergarten classroom; (11) instructional television; (12) physical education; (13) mathematics; (14) art; (15) science; (16) language arts; (17) social studies; (18) music; (19) using learning centers in the kindergarten classroom; and (20) classroom management. Also included are requirements for elementary and nursery-kindergarten certificates and general education requirements for elementary teachers K-3 and K-8; checklists for evaluating indoor and outdoor environments; a list of commercially available kits for instruction in the basic curriculum areas; a review of screening and standardized testing instruments, along with sample checklists; resource lists for parents, administrators, and teachers; an annotated list of instructional television programs for primary school students; patterns for worksheets; and words and melodies for numerous songs. (RH)

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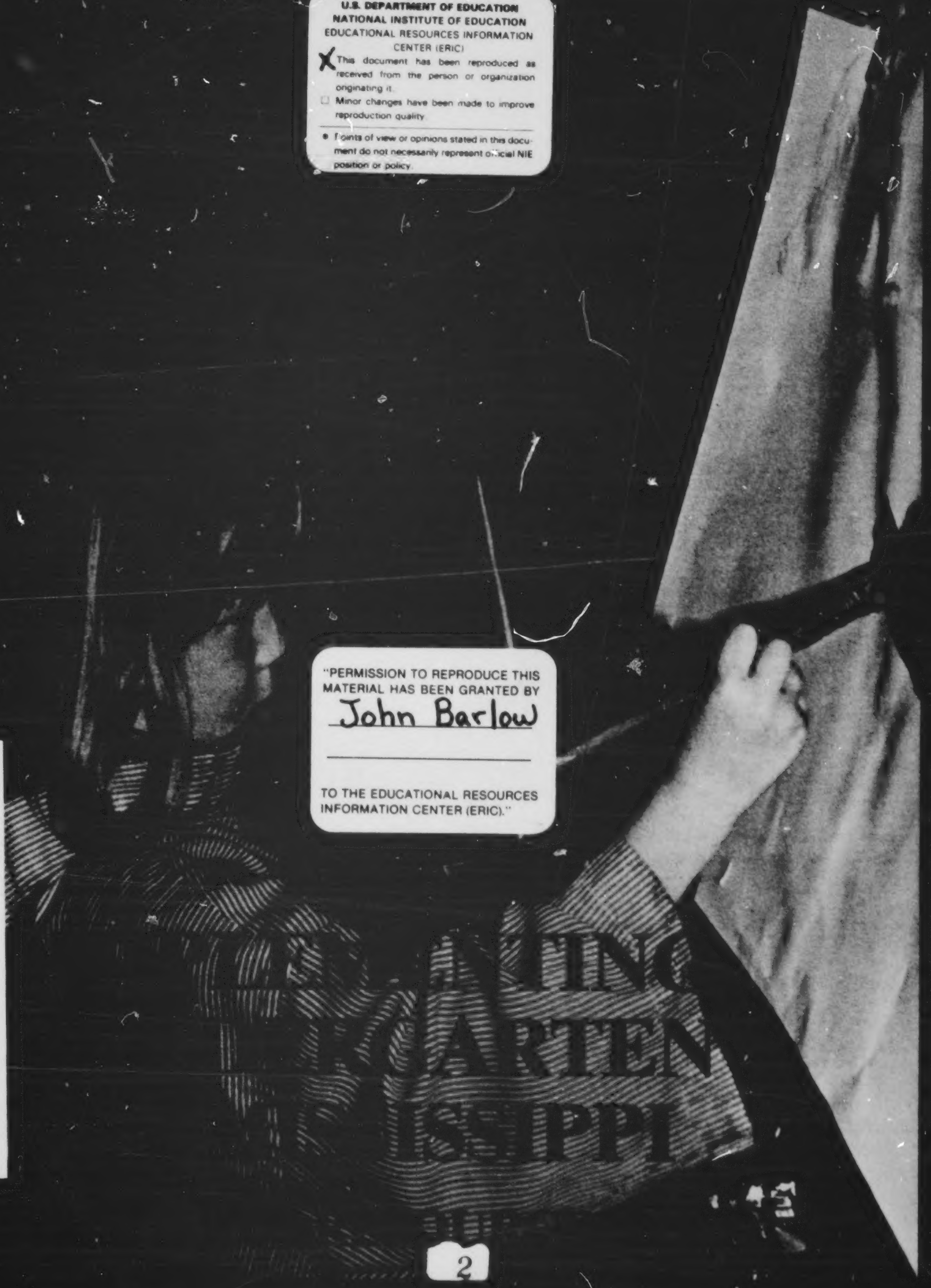

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The committees responsible for developing the chapters of this handbook are listed at the end of each chapter. The dedication and devotion of each committee member to this program is noted and greatly appreciated. Special thanks go to the children and teachers in Simpson County Schools for sharing the joy of kindergarten through the photographs in this book.

> WHEN I HEAR, I FORGET
> WHEN I SEE, I REMEMBER
> WHEN I DO, I LEARN
> -Old Chinese Proverb

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Implementing Kindergarten in Mississippi –
A Teacher's Handbook

Bureau of School Improvement
Mississippi State Department of Education

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PROGRAM PHILOSOPHY

THE PHILOSOPHY OF ANY PROGRAM IS WHAT CONSTITUTES THE PROGRAM GOALS, curriculum design, program activities, program materials and equipment, personnel qualifications, physical setting, and program organization. The following philosophy has been adopted for kindergarten programs implemented by public schools in the state.

The kindergarten program philosophy shall reflect an understanding of child development principles. These principles shall be embodied in the curriculum design and general learning environment. The instructional delivery is to be organized around learning centers where opportunities are provided for children to acquire skills and concepts involving problem-solving, decision making, questioning, evaluating, and discovering. **(Kindergarten Guidelines and Criteria, 1984)**

As children proceed through various stages of development their environment must stimulate and challenge to promote growth. Early childhood expert, Millie Almy states that each developmental stage carries with it possibilities for the acquisition of new abilities, new ways of processing information. **(Almy, 1964)** The kindergarten program content must guarantee opportunities to promote this acquisition of new knowledge and ensure the child's chance for later academic success.

Research conducted by Piaget indicates that intellegence emerges as it is nurtured, it grows as the child has things to act upon. **(Burgess, 1965)** These research findings support the philosophical attitude which is to be reflected in program design and implementation. With the teacher as the facilator the learning tasks should be sequenced, taking into account developmental levels of the students. Instructional techniques promote active participation by the learner with the teacher serving as chief architect in planning, evaluating, and deciding the program direction, as well as delivering the information to the child through interactions with the teacher, with peers, and with the environment through varied activities. Neubauer states "that rich and varied direct experiences in the early years provide a solid foundation for the subsequent development of facility in symbolic manipulations." **(Neubauer, 1965)**

The kindergarten philosophy is one which guides individual school districts in developing a program which reflects the student's needs, as well as community needs and attitudes within the confines of sound and proven educational principles. James Hymes states " ... the challenge to good education is to find the content and the methods of teaching that fit the young child. Then his mind will really stretch ... Our concern has to be to develop a love of learning." **(Hymes, 1974)**

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PROGRAM GOALS

The realistic goals for kindergarten education are as follows:

To help the child develop a positive self concept

To help the child to achieve intellectual growth as shown by maturation of thinking processes

To help the child to enlarge his/her world of people, experiences, ideas, and things

To help the child to increase competence and skills in communication

To help the child to increase the skills involved in physical coordination and body mastery

To help the child to increase competence in dealing with emotional feelings and social situations

To help the child to increase competence in self-direction and independence

To help the child to develop trusting relationships

To help the child to develop his/her curiosity and his/her creative potential

Personnel

What Is Today's
Weather?

PERSONNEL

The various roles of school staff members in the implementation of the kindergarten program are addressed in this section. While the teacher's role is emphasized, it is important to note that administrators are the leaders in making critical decisions with regard to program direction and emphasis.

SUPERINTENDENT

The superintendent is most significant in establishing the policy and direction of the early childhood program in each school district, for this reason he/she not only should have an understanding of the very young child, but of the type programs that allow the child to develop in the best possible ways. The person holding this position is the liasion person who must explain the program and how it benefits the school system to the school board and thus the community. Some of the responsibilities of the superintendent to the kindergarten program are:

1. **Formulate (with assistance from appropriate personnel) the school's plan for implementation of the kindergarten program.**
2. **Plan facilities which are conducive to productive operation of a kindergarten program.**
3. **Provide the materials essential to teach a kindergarten class, i.e., furnishings, instructional materials, and equipment.**
4. **Hire fully certified instructional staff for the implementation of the program.**
5. **Secure any community services that would supplement the kindergarten program.**
6. **Become acquainted with the specific characteristics of the five year old child and the significant differences in programming for that age versus the other children served in the school.**
7. **Provide opportunities for professional growth and staff development.**
8. **Support the kindergarten program and assist in informing the general public of the kindergarten purposes and philosophy.**
9. **Secure and share funding for the kindergarten program in the most efficient manner to provide the maximum classroom instruction.**
10. **Relate and enforce any standards as presented by the state and local school boards.**

EARLY CHILDHOOD COORDINATOR

The early childhood coordinator is an individual who serves as the facilitator of the school district's proposed early childhood program. This individual should work very carefully and closely with the school administration in structuring the type of program to be implemented in the kindergarten. The coordinator must have a thorough understanding of the child growth and development principles as they apply to the five year old child. The type program implemented should reflect the developmental abilities of these children. The coordinator is essential in planning, interpreting, implementing and evaluating the total program along with the various administrative personnel pertinent to the task. Some of the responsibilities of the coordinator should be:

1. **Plan with the administration and the instructional staff the facilities and instructional materials and equipment necessary for implementing the kindergarten and assistant teacher program.**
2. **Assist in securing fully qualified teachers for the classroom.**
3. **Assist in securing and training of assistant teachers who will work with the children and teachers.**
4. **Provide the needed activities for the continued professional growth of the teachers through staff development programs.**
5. **Keep fully knowledgable of professional information through the current literature, professional meetings, research, etc. to encourage the excellent practices essential to a good kindergarten and assistant teacher program.**
6. **Support teachers in securing educational services for children.**
7. **Establish a system-wide network of cooperation and sharing for good program planning.**
8. **Assist in providing teachers opportunities to visit other classrooms and schools for new ideas in classroom organization and instruction.**
9. **Provide the leadership that will enable each teacher to strengthen personal competencies.**

PRINCIPAL

The principal must fulfill a strong leadership role in establishing high quality kindergarten programs. The person in this position must carefully work with parents and the community as well as the administration in identifying, planning, implementing, and evaluating the kindergarten program. Some of the responsibilities of the principal should be:

1. **Relate in an effective manner to the kindergarten children, their parents, the school staff, and the community.**
2. **Coordinate staff planning with the appropriate administrative personnel.**
3. **Conduct the necessary staff planning meetings.**
4. **Relate and enforce any standards as presented by the state and local school boards.**
5. **Gain knowledge of the characteristics of the five year old child and the type programs needed for that age.**
6. **Support the teaching staff in setting up and implementing a program based on sound child development principles.**

7. Coordinate activities which will assist teachers to have a clear understanding of the program needed and how it is to be carried out.

8. Cooperate with the teachers in determining the needs and formulating the requests for instructional materials and equipment for use in the classroom.

9. Interpret the kindergarten program to any of the auxillary services involved in the school operation. This would include: "special" teachers such as music, art, and physical education; psychologists; speech counselors; librarians; cafeteria workers; and custodial staff.

10. Provide the appropriate teaching climate for optimum learning of young children.

11. Provide assistance and time for teachers to plan for instruction, to attend workshops, to attend seminars, and to participate in staff development training.

TEACHERS

The kindergarten teacher is the most significant adult in the lives of five year old children in establishing an attitude toward learning in a classroom setting. It is this person who helps to bridge the gap from home to school, paving the way for a quality learning experience. This position must be filled with persons who have appropriate training and philosophies, gentle personalities, thorough understanding of child growth and development, and an interest in developing the abilities of all children in the classroom. Some of the kindergarten teacher's responsibilities should be:

1. Model the kindergarten program in accordance with the needs and abilities of the individual child.

2. Believe in and implement a learning environment in the classroom which emphasizes the discovery approach to learning through the use of learning centers.

3. Recognize the individual needs of children enrolled in the program and seek the appropriate services to assist in providing the best care and education possible for the child.

4. Provide the appropriate educational situations to allow decision making and challenges to occur in the classroom which will promote the maturation of the child in all areas of development.

5. Recognize the need for close attention to the parent(s) and their influence on their child's educational experiences.

6. Maintain the ability to be an imaginative and creative teacher who can be flexible in planning and scheduling as the need is indicated.

7. Interpret the kindergarten operation to the school administration as well as the parent(s) and community in general.

8. Maintain good physical and mental health to insure the ability to function with the vitality necessary to work effectively with young children.

9. Understand the characteristics of the kindergarten child and plan a program accordingly.

10. **Maintain an interest in continued professional growth through self-study, staff development training, continuing education, and participation in professional organizations.**

11. **Maintain an instructional repertoire that demonstrates a variety of teaching methods.**

12. **Demonstrate appropriate classroom management techniques.**

CHARACTERISTICS OF A GOOD KINDERGARTEN TEACHER

Since the kindergarten teacher is the key to a successful kindergarten program, the qualifications of this person need special attention. Some of the basic characteristics that are important for consideration are:

1. **Be a fully certified teacher according to the state requirements as listed in Appendix A.**

2. **Have a thorough understanding of child growth and development principles.**

3. **Have some teaching experiences with the five year old which raises awareness concerning: the need for careful scheduling of active and passive activity times, resting, and toileting; attention spans; ability to follow directions; etc.**

4. **Have a strong energy level for working with young children.**

5. **Have a good sense of humor.**

6. **Have a commitment to helping children grow in independence and feelings of self-worth.**

7. **Possess enthusiasm for teaching and learning.**

8. **Be a creative and an imaginative person who is flexible enough to adapt the teaching situation for maximum enjoyment of learning.**

9. **Be emotionally mature.**

10. **Have a genuine enjoyment of children and an interest in helping them develop to their maximum potential.**

11. **Have a knowledge of classroom management principles appropriate to the young child.**

The following list may be used when interviewing potential kindergarten teachers already employed in the school system to help determine those traits which are important and consistent with the philosophy of the school district's program.

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TEACHER SELECTION CRITERIA

	YES	NO
Willingness to be flexible		
Ability to see the world as the child does		
Skill in asking questions		
Has teaching certificate in area		
Positive feelings toward: children		
teachers		
administrators		
Well organized		
Uses variety of teaching methods		
Sense of humor		
Fair, just, sincere, honest		
Well developed philosophy		
Well ordered / disciplined classroom		
Develops good self concept in children		
Personal and professional maturity		
Creative		
Develops love of learning, curiosity, and persistence		
Develops group dynamics		
Pleasant voice control		
Follows all school rules		
Wide interest in all areas		
Patience		
Pleasant disposition and consistent behavior		
Interested in pupil problems		
Aware of individual difference in children		
Good relationships with children		
Develops challenging thinking		
Fosters independence		

(Correro and Turner, 1983)

ASSISTANT TEACHERS

The assistant teacher in the kindergarten classroom is a necessity in order for the teacher to fully meet the individual needs of the children enrolled. At the ages when children are not sufficiently independent to manage well by themselves, it is important for safety reasons that a teacher have an assistant to help manage each situation in the classroom, crisis or routine. This position should be filled after careful screening and possible training for the work needed. The procedure for hiring assistant teachers for the kindergarten program is the same as that practiced in the hiring of assistant teachers for first, second, or third grade. The assistant teacher must.

1. **Have a planning time with the classroom teacher in order to understand and help the teacher implement the teaching responsibilities with the children.**

2. **Assist in the maintenance of the classroom order as it relates to housekeeping responsibilities.**

3. **Help in making instructional materials for use with the children as requested by the classroom teacher for use with the children.**

4. **Supervise small groups of children in activities as directed by the classroom teacher.**

5. **Provide services such as securing and setting up materials and equipment necessary to the teacher.**

6. **Provide help with clerical work for the teacher.**

7. **Work effectively and primarily with the children.**

Time spent in securing program personnel should be quality time, as the most important program decisions will be made in the hiring of teachers and staff. The old saying, "A program is only as good as its' weakest teacher," is one which should be recalled as the implementation of this new, exciting program begins.

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REQUIREMENTS FOR TEACHER CERTIFICATION

CHAPTER IV

REQUIREMENTS FOR TEACHER'S CERTIFICATES

A. ELEMENTARY AND NURSERY-KINDERGARTEN CERTIFICATES

GENERAL EDUCATION REQUIREMENTS FOR ELEMENTARY TEACHERS K-3 AND K-8

General education is that common body of knowledge which is thought necessary for affording the individual a broad cultural background, which deals with problems of a complex society, and which should equip him for active participation in the democratic social order.

All standard certificates issued to teachers on the elementary level require the completion of 48 semester hours in courses designated as "General Education."

		Sem. Hrs.
Career Education (to include economic awareness)		3
Children's Literature		3
English (to include six hours of composition and grammar)		9
Fine Arts		3
Comprehensive Health Course		3
Science and Mathematics		15
Biological Science	3 sem. hrs.	
Physical Science	3 sem. hrs.	
Mathematics (The structure of the real number system and its sub-systems)	3 sem. hrs.	
Geometry, Measurement, and Probability	3 sem. hrs.	
Electives	3 sem. hrs.	
Social Studies		9
American or World History	3 sem. hrs.	
Other social studies	6 sem. hrs.	
Speech		3
Total		48

ELEMENTARY TEACHER'S CERTIFICATES

CERTIFICATE	AUTHORIZATION	TENURE	MINIMUM REQUIREMENTS
Class AAAA	To teach in grades K-9 according to endorsement (01,98,99)*	Life	1. Hold a Class AAA certificate in elementary education 2. Hold an earned doctorate in elementary education 3. Five years teaching experience in elementary education
Class AAA	To teach in grades K-9 according to endorsement (01,98,99)*	10 years	1. Hold a Class AA teaching certificate in elementary education 2. (Hours for Class AAA must be in addition to those required for Class A and Class AA) Hold a Specialist or Doctorate degree to include a minimum of 9 semester hours of graduate elementary education OR 45 semester hours of graduate credit since the Master's degree was conferred with a minimum of 21 semester hours in elementary education with an overall 'B' average in all graduate work 3. Three years of teaching experience in elementary education
Class AA	To teach in grades K-9 according to endorsement (01,98,99)	10 years	1. Hold a Class A elementary teacher's certificate or hold a permanent professional certificate issued prior to July 1, 1939 2. Master's degree which includes 15 semester hours of graduate credit in elementary education 3. Educational Research . . . . 3 sem. hrs. 4. Curriculum Methods . . . . 3 sem. hrs. 5. Two years of teaching experience in the area of elementary education

*based on previous endorsement

ELEMENTARY TEACHER'S CERTIFICATES

CERTIFICATE	AUTHORIZATION	TENURE	MINIMUM REQUIREMENTS
Class A	To teach in grades K-3, K-8 K-3 (98) K-8 (98&99)	5 years	1. Bachelor's degree from an approved senior college 2. General Education listed on page 16 3. BASIC PROFESSIONAL EDUCATION REQUIRED . . . . 21 sem. hrs. a. Introduction to Elementary Education to include directed field experiences . . . . 3 sem. hrs. b. Basic reading skills. . . . . 3 sem. hrs. c. Educational Psychology . . . . 3 sem. hrs. d. Methods and Materials of Teaching Reading. . . . . 3 sem. hrs. e. Survey of the Exceptional Child . . . 3 sem. hrs. f. Internship/student teaching. . . . . . . 6 sem. hrs. 4. 18 SEMESTER HOURS IN SPECIALIZED EDUCATION (K-3, K-8) . . . . 18 sem. hrs. a. Art for Children . . . . 3 sem. hrs. b. Music for Children. . . . . 3 sem. hrs. c. Science for Children . . . . 3 sem. hrs. d. Social Science for Children . . . . 3 sem. hrs. e. Math for Children . . . . 3 sem. hrs. f. Language Arts and Communicative Arts. . . . . 3 sem. hrs. 5. PROFESSIONAL EDUCATION K-3 which must include the following. . . . . 15 sem. hrs. a. Child Psychology b. Communicative Arts for Early Childhood c. Methods and Materials for Early Childhood d. Kindergarten Education e. Audiovisual Education f. Early Childhood Curriculum g. Classroom Management h. Home and School Interaction i. Physical Education for Children j. Evaluation of Instruction

ELEMENTARY TEACHER'S CERTIFICATES
(Continued)

CERTIFICATE	AUTHORIZATION	TENURE	MINIMUM REQUIREMENTS
			6. PROFESSIONAL EDUCATION (K-8) which must include the following . . . . 15 sem. hrs. a. Child Psychology/ Preadolescent Psychology b. Language Arts in Elementary Grades c. Methods and Materials in Middle Grades d. Methods and Materials in Early Childhood e. Audiovisual Education f. Curriculum for Elementary Grades g. Classroom Management h. Home and School Interaction i. Physical Education for Children j. Evaluation of Instruction

NURSERY–KINDERGARTEN TEACHER

CERTIFICATE	AUTHORIZATION	TENURE	MINIMUM REQUIREMENTS
Class AAAA	To teach in nursery through kindergarten (97)	Life	1. Hold a Class AAA certificate in nursery-kindergarten 2. Hold an earned doctorate in nursery-kindergarten 3. Five years experience in nursery kindergarten
Class AAA	To teach in nursery through kindergarten (97)	10 years	1. **Hold a Class AA teaching certificate in nursery-kindergarten** 2. (Hours for Class AAA must be in addition to those required for Class A and Class AA) Hold a Specialist or Doctorate degree to include a minimum of 9 semester hours of graduate credit in nursery-kindergarten OR 45 semester hours of graduate credit since the Master's degree was conferred with a minimum of 21 semester hours in area of nursery-kindergarten with an overall 'B' average in all graduate work 3. **Three years of experience in the area of nursery-kindergarten**
Class AA	To teach in nursery through kindergarten (97)	10 years	1. Hold a Class A certificate in nursery-kindergarten 2. Master's degree patterned for nursery-kindergarten teachers which includes a minimum of 15 semester hours of graduate credit in education, 12 semester hours of which must be in nursery-kindergarten 3. Educational Research . . . . 3 sem. hrs. 4. Curriculum Methods . . . . 3 sem. hrs. 5. Two years of experience in the area of nursery-kindergarten.
Class A	To teach in nursery through kindergarten (97)	5 years	1. Bachelor's degree from an approved senior college 2. General Education listed on page 16 3. Foundations of Child Development . . . . 12 sem. hrs. Child Growth & Development . . . . . . 3 sem. hrs. Child & Family Relationships . . . . . . 3 sem. hrs. Child Health & Nutrition . . . . 3 sem. hrs. Child Psychology . . . . 3 sem. hrs. 4. Curriculum Methods . . . . 12 sem. hrs. Kindergarten Procedures . . . . 3 sem. hrs. Nursery-Day Care Procedures . . . . 3 sem. hrs. Science & Number Concepts . . . . 3 sem. hrs. Language Development & Literature . . . . 3 sem. hrs.

NURSERY–KINDERGARTEN TEACHER
(Continued)

CERTIFICATE	AUTHORIZATION	TENURE	MINIMUM REQUIREMENTS
Class A (Continued)			Creative Arts (art, music, etc.). . . . 3 sem. hrs. Principles of Early Childhood Education . . . . 3 sem. hrs. 5. Student Teaching (Below first grade) . . . . 6 sem. hrs. (Three years of teaching experience in the nursery-kindergarten field may be substituted in lieu of the directed teaching.)

ADDING KINDERGARTEN ENDORSEMENT TO ELEMENTARY CERTIFICATES (1 - 9)

Addition of nine semester hours

Early Childhood Education Methods	3 semester hours
Child Development	3 semester hours
Principles of Early Childhood Education . .	3 semester hours

The Child

THE CHILD

A familiar generalization from the literature of the anthropologist may be paraphrased to read; every kindergartner is like all kindegartners in some ways, like some kindergartners in other ways and like no other kindergartner in still other ways. This statement is particularly significant when planning for the successful operation of a classroom for young children. Teachers and administrators need to know the ways in which kindergarteners are alike, the ways in which they are similar, and the ways in which each are unique. **(Frymier and Galloway, 1974)**

•They Are Unique
Each kindergarten child is unique in terms of genetic make-up, learning rate and style, earlier development, accumulated experiences, feelings about self, and personal hopes and dreams. Providing optimum learning experiences for the kindergarten child requires awareness that each comes equipped with a set of individual differences. Through observation, analysis, and responsiveness to behavior, the differences among kindergarteners can be identified and individual needs met.

• They Are Similar
Each kindergarten child is similar to others in terms of sex, the language patterns acquired, immediate environment, and racial and ethnic origin. Knowledge of similiarities is useful when tailoring a kindergarten program as it provides teachers the information needed to gain a sense of probable interests, needs, and behaviors of young children. **(Hymes, 1981)**

•They are Alike
Each kindergarten child is like all kindergarteners in terms of basic needs and characteristics of growth and development. Knowledge of general developmental principles provides the framework upon which teachers and administrators can build the unique instructional program needed for the special qualities of the very young child. A program founded on sound developmental principles is necessary to provide appropriate learning experiences for each child. Recent studies have provided evidence to support the idea that the kindergarten period is particularly "critical" in the development of individuals and the quality of experiences at the time determines to a great extent their achievements in later years. **(Shepherd and Ragan, 1982)**

To facilitate the planning and development of learning environments, program goals, and instructional activities that are tailored to maximize growth and learning among all children, teachers and administrators must have a knowledge of how children develop. The following section is designed to provide a description of the general characteristics and needs of young children in five areas of development – language, mental, physical, emotional, and social. Suggested implications for instruction are included as guides for planning, not requirements for all situations.

CHARACTERISTICS OF CHILDREN FOUR TO SIX YEARS OF AGE

LANGUAGE

Characteristic and Need	Program Content	Teaching Technique
Vocabulary development is rapid	In all content areas, speaking and listening vocabularies can be increased.	Provide materials and experience in the classroom and in the wider community through field trips and visitors. Introduce and discuss new words and ideas in each content area. Explain new words in terms the children can understand.
	Have available a classroom library of children's books.	Read to children on daily basis; encourage children to look at books independently.
	Include language experiences as a regular part of the classroom program.	Flannel board stories and puppet stories can be used along with games and songs. Allow the children to dictate or tell their own stories. Provide tape recorder and blank tape for child's experimentation.
Children are developing pre-reading skills	Subtle teaching of left to right orientation.	When reading to children, hold the book on the left side so children will look from the teacher's face to the pages.
	Awareness of words in the environment.	Build sight vacabulary, i.e., recognize stop signs, McDonald's, etc. Discuss new words that come up during class activities. Use Rebus pictures that instantly represent words.
	ABC's - recognition and recitation and beginning sounds	Have letters on wall of room; utilize puzzles with alphabet; teach alphabet song; use pictures, fingerplays, etc.
Eyes are small muscles and thus immature	Fine motor activities provide base for pre-reading skills.	Plan fine motor activities.

MENTAL

Characteristic and Need	Program Content	Teaching Technique
Short attention span	Introduce concept; allow time for child to "work" in various learning centers.	Frequently change activities.
Children learn by doing and playing	Utilize the learning centers; science, math, language, art dramatic play, blocks, manipulatives or music.	Provide materials and opportunity for children to manupulate and explore with learning centers.
Children learn concepts of sequencing, classification, and ordering as well as personal information and facts about the world	Skills that children can attain: Recognition and identification of letters in the alphabet, including letter sounds in the initial position of a word, colors, number concepts, shapes, days of week; verbally communicate child's full name, home address, and telephone number.	Games and activities can reinforce a child's ability to recognize and identify. Can facilitate concept development through use of nursery rhymes, finger plays and songs. Teach these concepts with self-correcting activities in learning centers, i.e., puzzles or activities with only one solution.
Children develop and practice various intellectual skills	Activities which encourage and promote reason and logic; self-checking activities.	Provide opportunity for practice in learning centers; self-correcting activities are appropriate.
Children are curious and eager to learn	Areas of science, math, art, music, blocks, and manipulatives, free play in learning centers.	Providing materials and opportunities which enhance curiosity by providing open ended activities where the child decides what he/she is to do with materials.
Children are interested in major life events, i.e., birth, death, marriage, divorce	Individual content based on family situations of children enrolled.	Develop working relationship with each family. On an individual basis determine child's specific interest through questioning or active listening. Use books, animals, and classroom visitors to expand and clarify a child's knowledge; supplement with information for parents.

MENTAL

Characteristic and Need	Program Content	Teaching Technique
Memory can be enhanced		Allow experimentation of environment to foster creativity. Expand and exercise memory skills through questions, i.e., What did you do today? What was your favorite part of today? This could be a planned as well as spontaneous activity. Give children opportunity to perform a series of commands and instructions to follow. Tell the children "to remember" as reinforcement when giving directions.
Children often confuse fantasy and reality		When the occasion arises, discuss the difference between the two. Be receptive to child's ideas.

PHYSICAL

Characteristic and Need	Program Content	Teaching Technique
Need for rest and physical activities	Alternate quiet and active activities. A rest period is an essential part of each day. Some Some children will nap and those who do not still need the time to rest.	Alternate quiet and active periods; schedule time inside and outside. Play soft music, dim lights and provide nap pads or cots.
Large motor skills better developed than fine motor skills	Equipment that facilitates large motor development needed.	Plan time for exercise of large muscles; provide guidance in use of equipment.
Fine motor skills developing	Allow use of scissors; holding a pencil or crayon; working with art materials, manipulative toys; working puzzles, tying shoes, etc. Print first name and possibly last name.	Schedule time and provide opportunities with appropriate materials to practice skills.
Growth rates vary within and across children	Plan activities according to child's developmental level as determined by assessment.	Assess each child's developmental level, teacher observation, checklists, and assessment instruments. Employ teaching techniques which best meet the developmental needs of the child as reflected in the assessment.
Small stomachs and need to eat often	Snacks are needed in addition to lunch. Mid-afternoon snack may be needed if lunch were served at 10:30 a.m. and the school day doesn't end until 3:00 p.m. or if the children travel long distances by bus. (A minimum of 1½ hours is needed between snack and a meal.) Meal/snack time can be a learning experience for fine motor development, i.e. handling fork or spoon; can be a learning experience to emphasize colors, shapes, texture and also to learn about nutritive value of food and how food helps them to grow and develop.	Plan time for snack(s) and meal(s). The teacher(s) should eat with the children to serve as a role model and to foster a pleasant atmosphere at the table.

PHYSICAL

Characteristic and Need	Program Content	Teaching Technique
Need to be relaxed when eating meal or snack to prevent being too tired or too excited	Schedule short period of rest (on mat) after active play, followed perhaps with a story before lunch.	Plan quiet activity before meals.
Have immature body systems; need to go to bathroom fairly often; bladder not on schedule	Teach good bathroom habits, hygiene instruction.	Easiest if children allowed to go at will; accidents will happen and that's okay. A change of clothes for each child should always be kept at school.

EMOTIONAL

Characteristic and Need	Program Content	Teaching Technique
Child needs teacher to interact with his/her family in a positive manner	Intertwined throughout all content areas.	Establish communication network with family through periodic newsletters, notes, phone calls, conferences, home visits, parent meetings, etc.
Self-concept is developing; child needs positive reinforcement to strengthen and build strong self-concept	Intertwined throughout all content areas.	Give much praise and encouragement. Avoid telling child he/she is bad. Disapprove of child's actions or behaviors, but do not disapprove of child.
Children may express anger and frustration in different ways	Provide opportunities for constructive release.	Establish eye contact, speak in a calm, firm tone and explain why action is unacceptable. Disapprove of child's actions or behaviors, but do not disapprove of child.
All children are different	Intertwined throughout all content areas.	Help children learn to be tolerant of differences; speak of differences as being positive, all right; focus on advantages of differences and various social abilities.
Family is primary human relationship for the five year old	Intertwined throughout all content areas.	Discuss various types of families (in-tact, single parent, etc.). Discuss various types of homes (single family, apartment). Provide time, opportunity, and materials for imitation of adult activities – time to try out adult roles through dramatic play and taking responsibility in the classroom (i.e., feeding fish, watering plants).
Sex role identification. Children realize sex is a permanent characteristic (preschool children often think your sex is determined by your haircut or the clothes you wear and thus can change.) Children are very concerned about displaying sex-appropriate behaviors.	Intertwined throughout all content areas.	Accept child's experimentation with sex roles. Help and encourage children to view appropriate behaviors broadly, rather than narrowly - discourage sex stereotyping – boys can be nurses, girls can be truck drivers. Use books, dramatic play props, classroom visitors, and field trips.
Fears that a child has are legitimate to the child, although they may not reflect the real world.	Intertwined throughout all content areas.	Recognize that these fears are real to the child. Listen, provide support, and information. Assist children in developing strategies to deal with frightening situations.

EMOTIONAL

Characteristic and Need	Program Content	Teaching Technique
New situations such as entering school may be hard or frightening.	Intertwined throughout all content areas.	Be compassionate and understanding. Maintain open accepting atmosphere in classroom. Maintain contact with parents.
Children may express misplaced guilt feelings from major events of crisis: i.e., divorce, death, sickness, job loss or birth of siblings.	Experiences through literature that deal with similar situations.	Be compassionate and understanding. Encourage discussion of feelings. Seek parental support.
Children have a strong sense of fairness of authority.	Intertwined throughout all content areas.	Consistent classroom management.
Children's attitudes and degree of learning are influenced by their feeling of security in classroom.	Establish a consistent classroom routine.	Follow a schedule. Develop rapport between child/teacher. Nurture rapport between child and peers.

SOCIAL

Characteristic and Need	Program Content	Teaching Technique
Ready to develop social relationships, but also need time alone	Ask child how he/she could enter group; ask group how child could join.	Provide time for children to play both alone and with other children. Help children enter and play with groups of children if they seem unable to interact.
Sharing is hard	Games and/or activities which promote sharing.	Facilitate sharing by initiating a system of taking turns.
Children need to begin to solve their own problems		Assist children in solving their own problems; i.e., listen, ask questions, and identify alternatives and limits.
May or may not have best friends, but enjoy peer interaction		Provide opportunity for peer interaction and help children interact in positive manner. Listen, give feedback and suggestions on social interactions; suggest ways to approach and interact with other peers.
Children can and should clean up after themselves	Put away toys. Clean up after snack or lunch. Take responsibilities in the room.	Approach in positive manner; provide assistance.
Ready to develop self-help skills	Tying shoes, buttoning, zipping.	Offer opportunity for and encouragement of development of self-help skills. Watch as children try these tasks; offer suggestions and limited help; give praise for efforts and accomplishments.
Children learn from observing and imitating others	Can occur in learning centers and also in play time.	Offer play time and much opportunity in learning centers; observe behavior of children.

CHILDREN WITH SPECIAL NEEDS

Although all children have special educational needs at one point or another in their lives, some children require specialized attention more consistently. Included in this group is a wide assortment of youngsters ranging from those who are physically handicapped to those who are emotionally disturbed or who are experiencing intellectual development that lags behind or is markedly ahead of their peers. The category of exceptionality covers children who deviate far enough from the typical that they are noticeable in the group because of this deviation.

When a child deviates from the general age norms, the teacher's suspicion should be aroused, especially if the deviation is extreme, occurs often, and/or persists over a long period of time. The classroom teacher can try a number of activities which can help the child with minimal problems, striving to meet the demands of each child who needs something different from the planned program. As different expectancies are set for the children in terms of their capacities, varied teaching materials should be provided. These should be selected in terms of the level of capability, the limitations, and the characteristics of the individual child. When the teacher has exhausted the techniques at hand or when it is obvious that the child has a serious problem, assistance of specialized personnel such as the Special Education Program Developer in the school district should be utilized.

Many children with special needs profit greatly from a form of grouping known as "mainstreaming" (being a part of a regular group for at least some portion of the day). As with all children, an exceptional child should have opportunities to become friends and play with other children at an early age. All children learn from each other. The physically handicapped, the intellectually handicapped, the maladjusted, and the gifted child need to be treated in the same manner as other children and be able to share in those tasks in which they are able to participate.

CHARACTERISTICS OF SPECIAL NEEDS CHILDREN

SPECIAL NEED	CHARACTERISTICS OF	TEACHER INTERVENTION
Educationally Handicapped **(Educable Mentally Retarded)** **(Trainable Mentally Retarded)**	•Inability to follow multistep directions •Little self-direction in choosing activities •Tendency to imitate rather than create •Poor abstract reasoning ability •Difficulties in concentrating and learning •Inability to see similarities and differences in objects, and to anticipate consequences •Slower development than other children (walking, talking and toliet training)	•Show the child you like him/her and are pleased with him/her •Use as many direct experiences as possible •Use manipulative learning materials so that the child can experience sensory modalities (hearing, seeing, touching, tasting, smelling) •Plan for patient repetition •Provide constant positive reinforcers (reward and praise) for each accomplishment •Be consistent in your behaviors
Hearing Impaired	•Most often normal in all other areas of development •Shows speech problems: a. reluctance to speak b. speech very loud, very soft, very slow c. articulation (speech sounds) poor •Unresponsive when spoken to; may often ask "Huh?" or "What?" •Watches speaker's face while speaker is talking •Turns the head toward a speaker •Difficulty maintaining attention when spoken to •Complains of earaches or demonstrates action that indicates pain in the ear	•Develop an attitude of readiness to listen •Use voice (not tapping on shoulders or similar gestures that call attention to handicap) to get child's attention •Keep within close range when speaking •Use a normal conversational tone of voice
Visually Impaired **(Partially Sighted): Children whose field of vision is 20/200 (that is, can see at 20 feet what a normally sighted person can see at 200 feet) or better in the corrected better eye, but not greater than 20/70.**	•Most often normal in all other areas of development •Crossed eyes (strabismus) •Involuntary, rapid movements of the eyeballs (nystagmus) •Squinting and rubbing eyes •Reddened watery eyes; crust, sties or swollen lids •Tilting the head to one side	•Use sense of touch to help round out what the child hears •Arrange environment for free movement with safety •Tell child what is going on; teach other children to identify themselves when touching child •Let child make as many movements as possible by himself

SPECIAL NEED	CHARACTERISTICS OF	TEACHER INTERVENTION
Visually Impaired (cont'd) **Blind: Children whose field of vision is 20/200 or less vision in the corrected better eye**	•Pupils of uneven size •Sensitivity to light •Awkwardness in eye-hand coordination (puzzles, dressing, etc.) •Avoids tasks requiring good vision and demonstrates a lack of interest in normally appealing visual experiences	•Use a multisensory approach in teaching •Use concrete experiences •Encourage child to verbalize needs, rather than expecting them •Work for communication and praise the child for each success, remembering that receptive language always precedes expressive language
Physically handicapped (May include): **Cerebral Palsy** **Epilepsy** **Spina Bifida** **Paralysis**	General •This child is often an underachiever Specifics: •Unable to control muscle reflexes voluntarily •This often accompanies neurological disabilities such as cerebral palsy, seizures range from mild to severe •Condition results in impaired mobility, usually paralysis of legs; may also include mental retardation or lack of bladder and bowel control •Leaves the child unable to control parts of his body, especially the limbs	•Provide an accepting environment of warmth, tolerance •Develop motor abilities in the child through special materials, special aids, and supports for mobility and through special methods provided by the physical and/or occupational therapist •Develop language and speech, especially in the cerebral-palsied child, since this is the primary area where the majority are retarded or defective •Develop in the child the psychological factors of visual and auditory perception, discrimination, memory, and factors of intelligence
Emotionally Handicapped	•An inability to learn which cannot be explained by intellectual, sensory, or health factors •Inability to build or maintain satisfactory interpersonal relationships with peers and/or teachers •Inappropriate types of behavior or feelings under normal circumstances •A general pervasive mood of unhappiness or depression and/or a tendency to develop physical symptoms or fears associated with personal or school problems	•Accept the child as he is and know the individual child •Establish positive relationship •Determine goals •Try to find cause of the child's behavior •Use resource personnel

SPECIAL NEED	CHARACTERISTICS OF	TEACHER INTERVENTION
Gifted / Talented	•Has advanced vocabulary •Has quick recall of factual information •Grasps underlying principles •Persistent in task completion •Strives for perfection •Gets bored with routine tasks •Has great curiosity about many things •Has great originality in problem solving •Self confident •Adapts easily to new situations	•Build additional language skills •Provide "concrete things" for them to explore by taking apart and reassembling •Offer more complex materials or advanced information •Offer enriched curriculum •Use instructional materials that foster problem solving and encourage development of creative ideas
Language / Speech	**Language:** •Silent much of time •Does not respond to questions •Verbal responses do not directly answer question asked •Verbalizations are unclear or muddled •Has to search for words •Hesitant to engage in verbal interaction •Uses words and sentence patterns that are immature •Level of vocabulary development low **Speech:** •Substitutes one sound for another •Omits sounds •Distorts sounds •Voice too loud or too soft •Pitch too high or too low •Voice consistently hoarsly harsh or breathy •Rate of delivery too fast or too slow •Disruption in normal flow of speech •Words prolonged •Syllable or sounds repeated excessively	•Refer child to speech therapist or Special Education Coordinator •If the child doesn't qualify for speech therapy, consult with speech therapist for intervention procedures
Abused	•Introverted, passive behavior •Lack of expression such as sadness, anger, and joy •Non-communicative behavior •Shy and fearful •Wanting desperately to do what is right	•Establish positive relationship with child •Show available filmstrips on neglect and abuse •Document occurences •Report to school nurse and local child welfare agency •Confidentiality •Develop awareness that these children exist in all socioeconomic levels

SPECIAL NEED	CHARACTERISTICS OF	TEACHER INTERVENTION
Neglected	•Abandonment •Frost bite, sunburn •Medical, dental neglect •Sores or injuries that do not heal normally •Malnourished •Complaints of hunger •Eating other children's food	(Same intervention as described in section of the abused child)

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THE CHILD

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The Learning Environment

daylight
GYMNASTICS
TEAM

THE LEARNING ENVIRONMENT

The concept of the kindergarten is best realized in a prepared environment — an environment that reflects the philosophy of the program and one in which the principles of child development and learning theory can fluorish. **"The more new things a child has seen and heard, the more he wants to see and hear. The rate of a child's intellectual growth, then, is a partial function of his environmental opportunity and circumstance." (Piaget)**

GENERAL PROCEDURES AND SPECIFICATIONS FOR RENOVATING OR CONSTRUCTING CLASSROOM FACILITIES FOR KINDERGARTEN STUDENTS

•Any school district which plans to renovate or construct classroom facilities for the purpose of having kindergarten classrooms must follow the procedures outlined by the **School Building and Transportation Division of the Mississippi State Department of Eduction** and **Kindergarten Guidelines.** It is important to study and follow all the rules, regulations, and procedures. (A copy of "Procedures For New Projects" may be obtained from the State Educational Finance Commission.)

•School districts that have to renovate or construct classroom facilities should contact the Educational Finanace Commisssion concerning funding. Whenever funds are available from the EFC, $5 per square foot is allowed for renovation and $15 per square foot is allowed for new construction.

•Any renovation or new construction project should take into consideration energy conservation measures such as wall and ceiling insulation, insulated windows, energy efficient equipment, and timing devices for turning heating and cooling equipment off and on. It is also suggested that attention be paid to needed acoustical treatment.

APPROXIMATE COSTS

A. Maintenance / Operation - Many variables that must be considered to fairly project maintenance / operation costs. Some fo the variables that must be considered are:

1. Type of construction and the amount of insulation.
2. Is energy efficient equipment being used for heating and cooling?
3. Rates being charged by the local utility companies. Rates vary throughout the state.
4. Geographic location of the school district. Temperatures differ as much as 25° to 30° from the north end of the state to the Gulf Coast.
5. Does the district do its own maintenance work or do they hire outside electricians, plumbers, carpenters, etc.?

B. New Building Construction (refer to the **Mississippi State Department of Education Kindergarten Guidelines**)

C. Modular Building / Classrooms (approximately $8 less per square foot than construction costs)

D. **Renovation**

E. **Playground** - many variables come into play, but the primary concerns are the amount and types of playground equipment, installation costs, maintenance costs, and landscaping costs. A quality playground can cost as much or as little money as is available. It is impossible in today's world of fluctuating prices to place a cost estimate on a piece of playground equipment due to inflation. With careful planning and a little effort made to acquire donations of stumps, lumber, poles, hardware, and labor, the costs can be kept minimal. On the other hand, large school supply companies now offer attractive wooden play units that can reach exorbitant prices.

The chief cost of building a playground is the labor cost. Many school systems can reduce the cost by having shop classes act as the construction workers. Parents are also willing to work as "weekend builders" in many cases. One way to promote community support is to ask parent groups, local businesses, or civic organizations to donate one piece of equipment, and to decorate the structure with a small metal plaque in their honor.

THE INDOOR ENVIRONMENT

The indoor environment will be influenced by the physical plant. After determining whether a new structure is to be built or whether an existing structure will be utilized, room arrangement must be planned. The learning center concept of physical space is one which accommodates the theoretical principle of "learning by doing."

Learning centers are designated areas within a classroom that are equipped to enhance the development of skills and concepts pertinent to the kindergarten curriculum. They may be used by individual children or small groups of children.

Learning centers divide a classroom in such a way that children are invited to make choices and are encouraged to share in the responsibility for their learning. Learning centers can be designed and equipped to whatever monetary resources allow; however, the classroom should be equipped to meet the needs of approximately twenty-two (22) children. Learning centers should be flexible, with emphasis on the curriculum. Centers suggested for use in the kindergarten include:

1. **Creative Art** for helping children develop self expression, visual perceptual abilities, and pre-writing skills.
2. **Housekeeping / Dramatic Play** for helping children develop language and social skills, as well as to provide an emotional outlet.
3. **Block Building** for helping children develop problem solving, logical thinking, and motor skills.
4. **Science / Social Studies** for developing motor, perceptual, language, and cognitive skills
5. **Math** for helping children develop mathematical concepts through problem solving and logical thinking.
6. **Music** for developing language and perceptual skills.
7. **Woodworking** for developing motor and perceptual skills.
8. **Language / Library / Printing** for developing speaking, listening, pre-reading, pre-writing, and reading skills.
9. **Sand / Water** for developing motor, perceptual, language, and cognitive skills.
10. **Manipulative Toys** for developing fine motor skills, logical thinking, and cognitive skills.
11. **Cooking** for developing logical thinking, good hygiene, and language skills. **(Correro and Turner)**

II.

The following diagrams are of kindergarten classrooms which could be considered if new construction is to be undertaken.

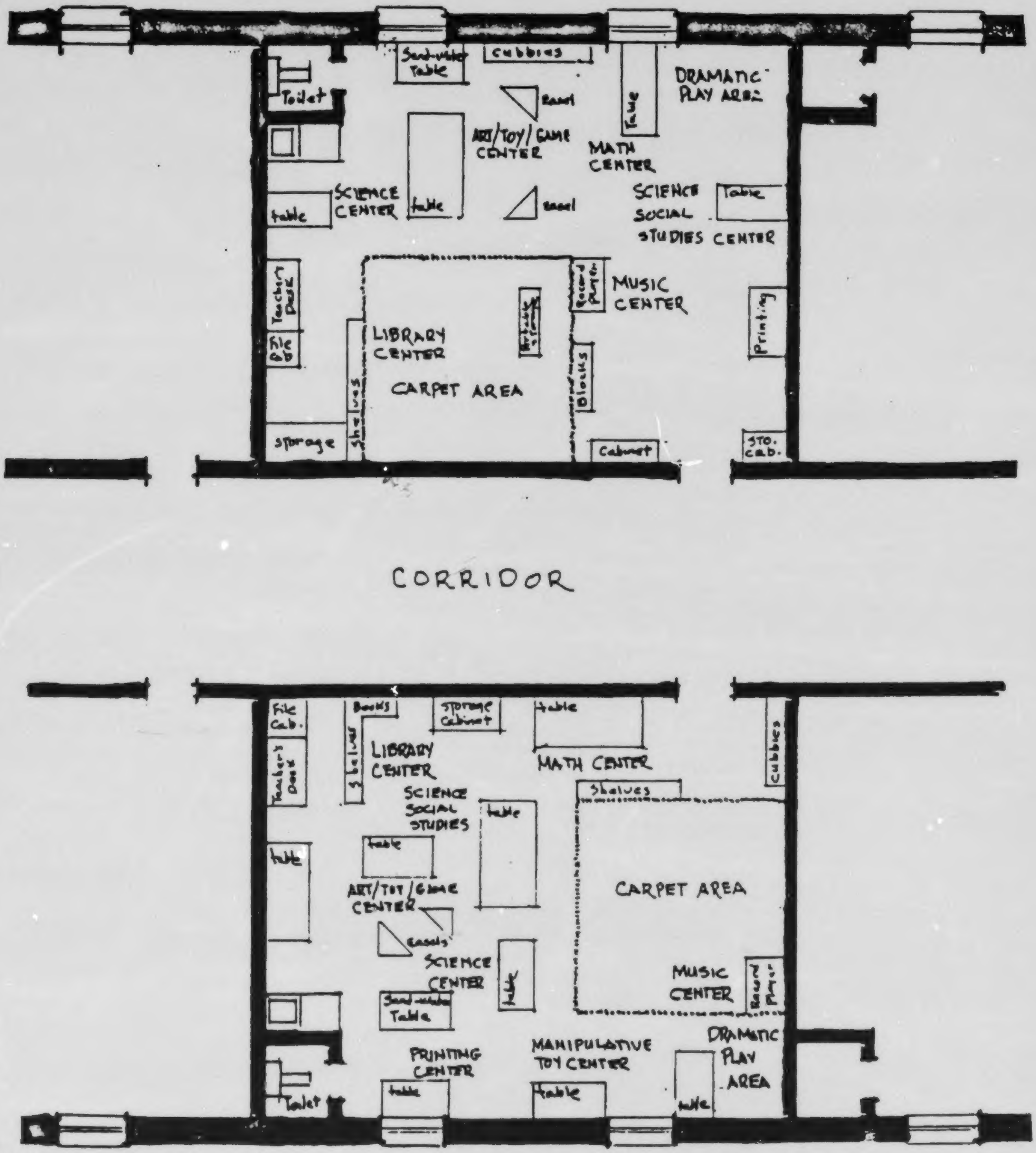
Toilet
Sand-water Table
cubbies
Easel
Table
DRAMATIC PLAY AREA
ART/TOY/GAME CENTER
MATH CENTER
SCIENCE CENTER
table
table
Easel
SCIENCE SOCIAL STUDIES CENTER
Table
Teacher Desk
File Cab
LIBRARY CENTER
Record Player
MUSIC CENTER
Printing
CARPET AREA
shelves
Blocks
storage
Cabinet
STO. CAB.
CORRIDOR
File Cab.
Books
Storage Cabinet
table
Teacher's Desk
shelves
LIBRARY CENTER
MATH CENTER
cubbies
SCIENCE SOCIAL STUDIES
Shelves
table
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table
CARPET AREA
ART/TOY/GAME CENTER
Easels
SCIENCE CENTER
table
MUSIC CENTER
Record Player
Sand-water Table
DRAMATIC PLAY AREA
PRINTING CENTER
MANIPULATIVE TOY CENTER
Toilet
table
table
table

TYPICAL KINDERGARTEN CLASSROOM PLAN
NO SCALE

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The following floor plans are diagrams of actual classrooms that have been renovated for a kindergarten in an existing elementary school.

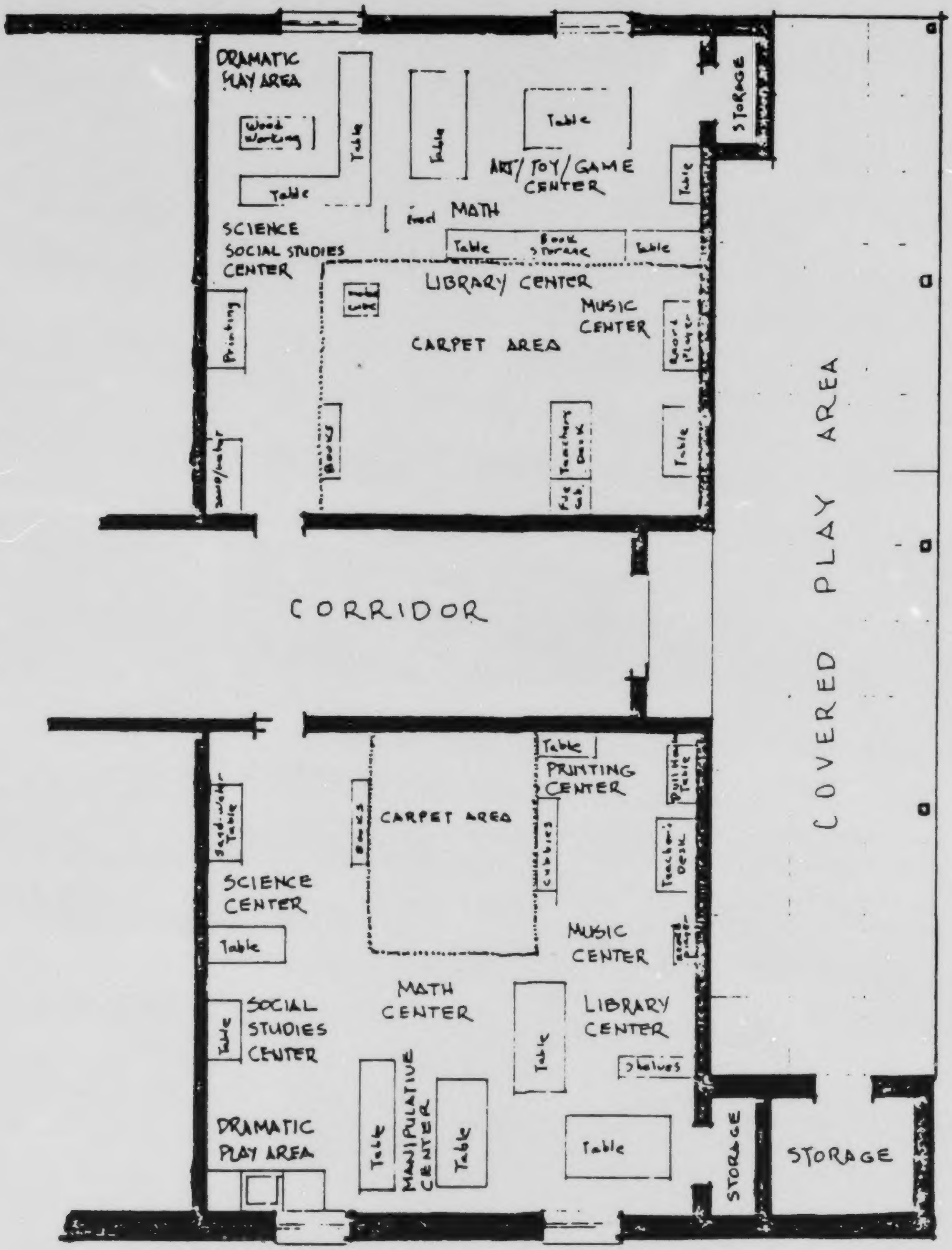
DRAMATIC PLAY AREA
Wood Working
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Table
Table
ART/TOY/GAME CENTER
STORAGE
Table
Easel
MATH
SCIENCE SOCIAL STUDIES CENTER
Table
Book Storage
Table
LIBRARY CENTER
MUSIC CENTER
Record Player
CARPET AREA
Printing
Books
Teachers Desk
File Cab.
Table
Sand/water
CORRIDOR
COVERED PLAY AREA
Table
PRINTING CENTER
Pull Out Table
CARPET AREA
Books
Cubbies
Sand-water Table
Teachers Desk
SCIENCE CENTER
Table
MUSIC CENTER
Record Player
MATH CENTER
LIBRARY CENTER
SOCIAL STUDIES CENTER
Table
Table
Shelves
MANIPULATIVE CENTER
Table
Table
Table
DRAMATIC PLAY AREA
STORAGE
STORAGE

TYPICAL KINDERGARTEN CLASSROOM PLAN
NO SCALE (Without water supply in the classroom)

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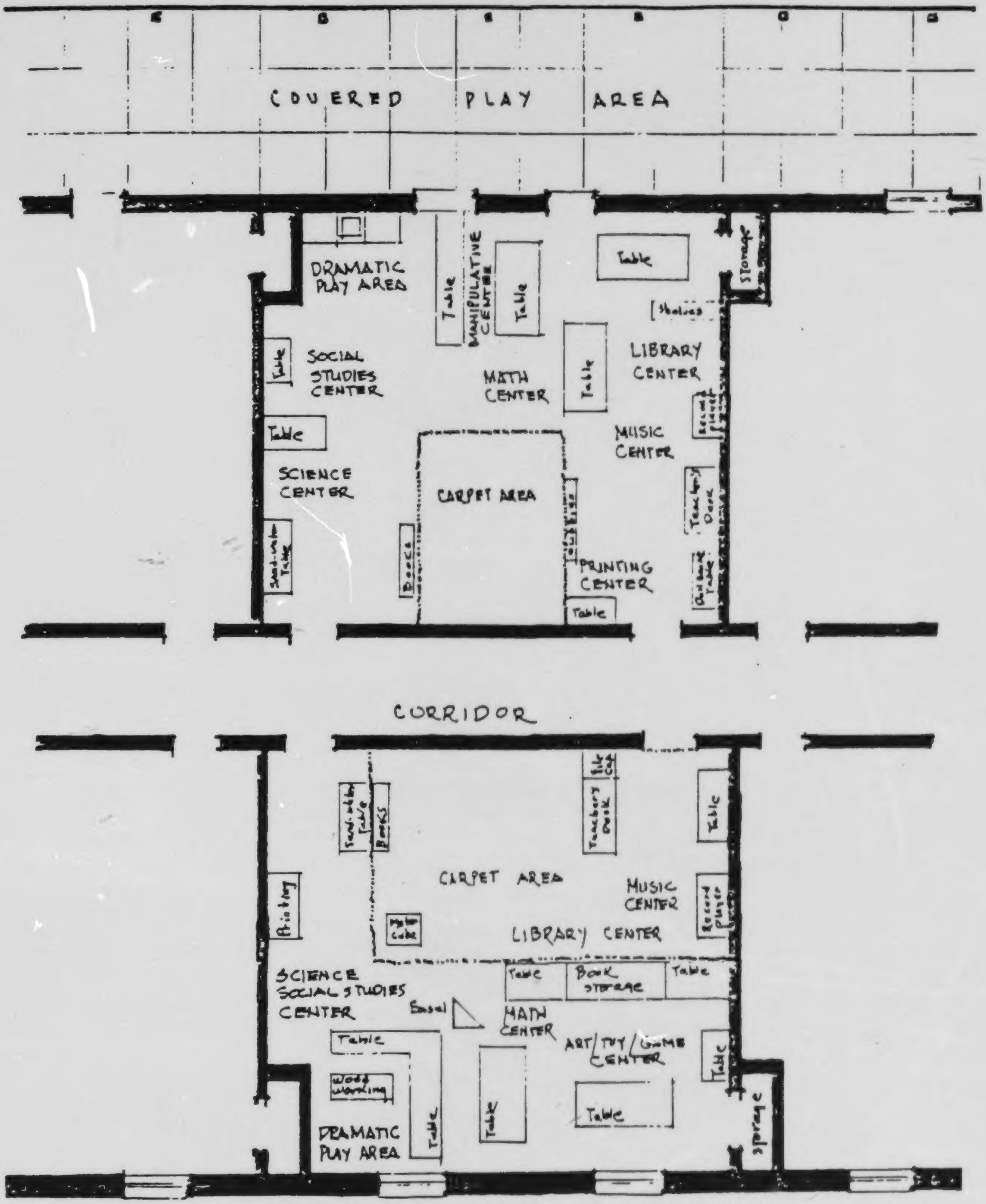
COVERED PLAY AREA
DRAMATIC PLAY AREA
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MANIPULATIVE CENTER
Table
Table
Storage
Shelves
SOCIAL STUDIES CENTER
Table
MATH CENTER
Table
LIBRARY CENTER
Table
Record player
MUSIC CENTER
SCIENCE CENTER
CARPET AREA
Teacher's Desk
Sand-water Table
Books
PRINTING CENTER
Table
CORRIDOR
Sand-water Table
Books
File Cab
Teacher's Desk
Table
CARPET AREA
MUSIC CENTER
Record player
LIBRARY CENTER
SCIENCE SOCIAL STUDIES CENTER
Table
Book storage
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Easel
MATH CENTER
ART/TOY/GAME CENTER
Table
Table
Wood working
Table
Table
Table
DRAMATIC PLAY AREA
Storage

TYPICAL KINDERGARTEN CLASSROOM PLAN
NO SCALE (Without water supply in the classroom)

In designing the classroom precisely, the various pieces of furniture and equipment should be drawn to scale. Arranging the scaled drawings on graph paper will determine location and accessibility. After developing the floor plan, the following checklist to ensure that nothing has been omitted could be utilized.

CHECKLIST FOR EVALUATING INSIDE SPACE ENVIRONMENT

YES	NO	
		Pathways - you don't have to go through one area to get to another
		Centers of Interest (Learning Centers)*

1. Art
2. Housekeeping / Dramatic Play
3. Block Building
4. Science / Social Studies
5. Math
6. Music
7. Woodworking
8. Language / Library / Printing
9. Sand / Water
10. Manipulative Toy
11. Cooking

*** May be rotated on a daily or weekly basis**

YES	NO	
		Places for children to have privacy
		Storage Areas
		Noisy areas are together - blocks and dramatic play
		Sink close to art area
		Teacher area
		Cubbies or lockers for the children
		Dividers - may be an area rug, a storage cabinet, or a display board
		Bathrooms
		Tables for eating and playing with table toys
		Display areas
		Cots or mats with storage areas
		Carpeted areas
		Non-carpeted areas - for sand / water play or art activities **(Correro and Turner)**

THE OUTDOOR ENVIRONMENT

The outdoor environment is as important to the learning of the young child as the indoor environment, and an investment in interesting and safe playspaces will provide rich educational returns. One of Mississippi's abundant resources is the natural outdoor environment available even in the most urban areas.

CHECKLIST FOR PLAYGROUND EVALUATION

After designing the playground it is wise to build a model before beginning construction. This need not be a scaled model, but can even be constructed of old boxes, cans, sticks, and other junk materials. The three-dimensional model will give more of an idea of any problems that might be encountered in a real playground than can a drawing. After completing the model, use the following checklist to evaluate the plan.

YES	NO	
__________	__________	Are there any areas where traffic is likely to be a hazard?
__________	__________	Is a child coming down from one piece of equipment automatically drawn to another?
__________	__________	Is an area provided for quiet dramatic play away from active play areas?
__________	__________	Is the number of play events provided three times the number of children who will be using the playspace at one time?
__________	__________	Is there a storage space for temporary equipment?
__________	__________	Does each piece of equipment have more than one purpose and more than one use?
__________	__________	Does the equipment lead children to several different spatial levels?
__________	__________	Is provision made for creative activity through manipulative materials, construction materials, sand and water play, etc.?
__________	__________	Is the playground aesthetically appealing and does it provide various colors and textures, natural garden or growing areas, pathways, and other landscaping details?
__________	__________	Is provision made for social, cognitive and physical play?
__________	__________	Is the play area as safe as possible, and is it completely fenced to ensure safety from external hazards?
__________	__________	Is the area likely to be stimulating and exciting for children?

DAILY SCHEDULES

The daily schedule should allow time for both active and quiet activities. It should also provide a balance between teacher-directed and child-directed experiences. **(Correro and Turner)**

Child directed experiences are frequently referred to as free play. Preparation for free play is made by the teacher prior to the arrival of the children. Each child has a choice to work (play) with a variety of basic media, such as, art supplies and manipulatives. If a child chooses not to work independently, the child may join a small group activity which may consist of playing with blocks, enjoying the sand / water table, the woodworking bench, or listening to records.

The children should be responsible for cleaning up any clutter generated by free play time. For example, they should replace media and materials to assigned shelves and make the room neat.

After free play time, the children and the teacher should be seated on a carpeted area. The teacher should encourage the children to share verbally any experience or item of interest, thus stimulating and emphasizing language development. During this block of time, the teacher should take the opportunity to incorporate some specific teaching concept pertaining to the planned unit of study.

The child then should have the option of working in a learning center which best fulfills his/her needs. During center time the teacher should work with individuals and small groups to help expand and clarify the experiences which have been introduced in group time and to help children develop skills in areas in which they show a weakness. After center time each child is again expected to assist in clean-up activities.

Outside play provides an opportunity for individual, large and small group motor activities, both teacher directed and child directed. Outside play provides opportunities for cognitive, perceptual, motor, social, and creative growth.

Snack time offers an opportunity to prepare the snacks and to distribute them. Through this activity children learn cooking skills which employ reading, math and science skills. They learn about nutrition, and they develop social skills.

During rest time, the children should be encouraged to quietly look at books, listen to selected records or rest. Thus, the child learns to relax and is given the opportunity for his/her body to rest. This can be translated into good health habits by the teacher.

A second group time often includes musical or physical activities to provide a change of pace that young children need. Also, books are specially selected and read to compliment the specific unit of study. An attempt should be made to evaluate the day's activities by summarizing with the children all important events of the day.

Consider the following schedule as one that might be followed in a kindergarten classroom:

SUGGESTED DAILY SCHEDULE

TIME	**ACTIVITY**	**PURPOSE**
7:45 - 8:00	Arrival	Develop good self concept, language skills
8:00 - 9:00	Center Time*	Develop direction, responsibility
	1. Art	Develop self expression, visual perception pre-writing skills, creativity
	2. Science	Develop questioning, probing, problem solving skills
	3. Dramatic Play	Develop language, social, and divergent thinking skills; provide emotional outlet
	4. Manipulatives	Develop fine motor, logical thinking, and mathematical skills
	5. Block	Develop problem solving, logical thinking, mathematical, and motor skills
	6. Music	Develop listening skills, motor skills, and self expression
	7. Library	Develop love and appreciation of books, and reading readiness background
	8. Language Arts	Develop communication skills

	9.	Math	Develop classifying, ordering, and comparing skills
	10.	Sand / Water	Develop language, science, and mathematical skills
	11.	Woodworking	Develop motor skills and creative thinking skills
	12.	Cooking	Develop logical mathematical thinking and language skills
9:00 - 9:15		Clean Up	Develop responsibility and cooperation

*** Selected centers are chosen by the teacher from those listed for use daily and/or weekly. The choice should vary from week to week based upon the skills to be taught.**

9:15 - 9:40	Group Time	Develop language and motor skills, self-control, mutual respect
9:40 - 10:00	Snack	Provide nutritional supplement, develop language and socialization skills
10:00 - 10:30	Outdoor Play or Large Motor Activity	Develop language, motor, socialization, and creative thinking skills
10:30 - 11:00*	Group Time Evaluation Clean Up	Develop appreciation of literature; development of unit theme Summarize, reflect, plan. Develop responsibility and cooperation
11:00 - 11:30	Lunch	Provide nutritional supplement and develop socialization skills
11:30 - 12:15	Quiet Time	
12:15 - 12:30	Group Time	
12:30 - 1:00	Outdoor Play / Large Motor Activity	
1:00 - 1:15	Snack (optional)	
1:15 - 2:30	Center Time	(refer to those listed above)
2:30 - 3:00	Clean Up / Group Time / Evaluation / Dismissal	

*** Half day programs would end at this time. The morning schedule can be repeated for the afternoon session.**

CHECKLIST FOR EVALUATING SCHEDULES

YES	NO	
		Begins with a friendly, informal greeting of children
		Beginning group activity
		Physical needs (i.e. tolieting and eating) cared for at regular intervals
		Balance between physically active times and rest
		Fits program philosophy
		Balance between indoor and outdoor activities
		Balance between group and individual times
		Balance between child-selected and staff determined activities
		Flexible schedule
		Ends with general evaluation of activities
		Ends with straightening of indoor and outdoor areas
		Ends with a hint of "what we will do tomorrow" and a farewell

Time should be taken to develop the schedule; it should be written down; and then the checklist used to insure that nothing has been omitted.

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Program Curriculum

PROGRAM CURRICULUM

A well planned, efficiently organized curriculum helps to support each child's development while greatly influencing all the learning that follows. By creating a favorable learning environment, which takes into consideration the general knowledge of growth and development, the wide range in rate, timing and past experiences; children are more likely to reach their potential. All five year olds need opportunities for developing socially, physically, emotionally, and intellectually.

This section of the resource handbook attempts to provide administrators and teachers with information concerning the development of a challenging, comprehensive curriculum based on the developmental needs of five year olds.

WHO DETERMINES THE CURRICULUM?

Each child arrives in kindergarten with an individual pattern that mirrors all past experiences. Much of the child's early education results from the participation in family and community activities. **(Piaget 1969)** The continued need for nurturance during the transition from home to school necessitates association with input from the child's family and community. To gain needed information for the curriculum design, one or all of the following might be pursued.

1. Acquire information at registration concerning child's background experiences. This will be utilized by the teacher as a basis for individual curriculum planning for each child. (See sample registration form, Appendix D)

   -Past health history and health problems
   -Past developmental experiences (self-care activities, language fluency, etc.)
   -Geographical locations family has resided
   -Child's special interest and abilities
   -Proximity to school and transportation needs
   -Nutritional status and possible food allergies
   -A listing of other family members or those involved in daily care of the child.

2. Circulate a questionnaire requesting specific feedback from prospective kindergarten parents. A listing of proposed school procedures / policies might be included to serve as a beginning orientation. The completion of a needs assessment should secure some of the information listed below which can be utilized for development of the curriculum design.

   - Are necessary services needed by child / family available and assessible?
   -What are main businesses / industries employment parents, operational hours and unemployment levels?
   - What is status and quality of child care?
   - What family pattern (single, extended, i.e.) predominates?
   - What strengths are present in the culture; diversity of the community?

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WHAT SHOULD A KINDERGARTEN CURRICULUM INCLUDE?

Curriculum can be defined as a plan for providing learning opportunities for the achievement of broad goals designed for specific school population. This plan for learning, consists of a systematic arrangement of time, materials, and tasks.

Curriculum content planning involves thinking about what is to happen, why it is to occur, and how desired results will be achieved. To do this, five important principles concerning the nature of children and how learnng occurs should be considered:

1. Children learn as total persons (emotionally, socially, physically, as well as intellectually). **(Kamii, C., 1971) (NAEYC, 1983)**

2. Children proceed through similar stages of development, but at individual rates. **(Piaget and Inhelder, 1969)**

3. Children learn when many of the senses are involved (hearing, seeing, touching, tasting, and smelling). **(Burgess, 1965) (Barbe, Swassing, and Milone, 1979)**

4. Children learn through active involvement (exploring, manipulating, problem-solving, and playing.) **(Hartley and Goldenson, 1952)** "Play is the principle means of learning in early childhood. It is the way through which children reconcile their inner lives with external reality." **(Plowden Report, 1967) (Almy, 1984)**

5. Children learn through attitudes as well as through content. The way a child learns is just as important as what a child learns. **(Cohen & Rudolph, 1977)**

Planning a challenging, comprehensive curriculum content, based upon developmental needs of young children should include the following:

PROGRAM GOALS AND OBJECTIVES

Goals are generally stated in broader terms than objectives and provide the foundation and reasoning base of the program.

Example: "The child will be able to verbally express himself by using an increasingly wider range of vocabulary and length of syntax."

After identification of program goals, specific behaviors indicative of having reached the goal should be identified.

Example: "Given a familiar object, the child will identify by name, using at least a three word sentence to describe, 80 percent of the time." (or 2 out of 3 attempts)

Objectives are useful in helping an administrator or teacher think seriously about which goals for children have the greatest value; and for defining clearly how one knows the child has reached a specific goal. However, careful consideration should be given to avoid specifying such tiny points that the real substance of education is bypassed.

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SCHEDULING

The length of day will probably be determined by each district's availability of classroom space, number of children and transportation. Ideally, the full day program is reported to be more advantageous for children mainly due to an increase in hours devoted to individual for learning. **(Henrick, 1980)** Half-day schedules present a special problem for children who have been accustomed to an afternoon naptime.

Whatever the length of the day, careful planning and flexibility represent key ingredients to achievement of child potentials. (See Daily Scheduling, Learning Environment Section) The scheduling of curriculum activities will either build the child's feelings of security or accentuate insecurities. The routine designed to support a child's development should permit modification and breadth in providing differences. Schedules should not be dominated by clock hours in a minute to minute fashion. Both structural and free activity time are planned through utilization of broad units of study and learning center activities.

CURRICULUM CONTENT AREAS

Just as social, emotional, physical, and intellectual development do not occur in isolation, understanding concepts in math, language, and other content areas does not develop in an isolated way. However, for the sake of organization, separate content areas will be addressed individually on pages which follow.

1.) Language Arts

Communication skills are crucial to a child's acquisition of personal and later academic achievement. Each child arrives in kindergarten with individual developmental and cultural patterns that provide insights to past experiences. These are utilized for building a rich communication repetoire based upon speaking, listening, writing, and reading readiness experiences. Kindergarten teachers shoud be respectful of any cultural or second language abilities when planning activities for building verbal communications. These listening and speaking opportunities arising from the natural, integrated experiences, will foster maximum improvement of each child's vocabulary, sentence structure, and appropriate sequence abilities. **(Illinois Curriculum Guide, 1980)** Openly or harshly correcting a child's language tends tends to inhibit growth.

The language experience approach will facilitate the learner's usage of language and thinking, as a foundation for reading instruction. This approach has been of tremendous value at this readiness stage of development. **(Strickland, 1966) (Leeper, et. al, 1984)** The strength of any reading program is embedded in a strong language development program. Care should be taken that reading readiness activities not deteriorate into meaningless drill workbook experiences.

2.) Social Studies

Children need to have guidance as they acquire basic concepts, ideas, and beliefs about society and the world in which we live. These understandings should be related to interests that arise naturally from daily living experiences. Activites should be aimed at developing an appreciation of the interrelationship of individuals in the family, school, and community. The practice of important social habits and the encouragement of greater independence in democratic group living should be of paramount importance.

3.) Art

The classroom environment which provides for a variety of art media is one that will be both stimulating and challenging to every child. Through non-structural "hands-on" activities visual discrimination, eye-hand coordination, and small muscle development is enhanced. One of the more predominant reasons for including art activities in the daily schedule is the expansion of a child's capacity for creativity. Young children begin with basic simple materials using a variety of colors which have been introduced one at a time. Later, more complex techniques and materials are added to the art center activities. Motivation is the key to creativity and independence, but both are supported through guidance toward individuality. **(Oklahoma Curriculum Guide, 1981)**

4.) Science
Science activities which utilize an inquiring, problem solving approach. permit children to draw information from their experiences and develop understanding about the world around them. The young child's natural sense of wonder is broadened as each matures and develops concepts. Simple, appropriate materials provide accurate ideas which are extracted from the environment. Topics for study include the nature of living things, our bodies, the earth, the universe, matter and energy. Also important is a curriculum process which includes observation, classification, recognition of space/time factors, and measurement.

5.) Mathematics (Number Readiness)
Experiences with numbers have been a part of a child's environment long before entering kindergarten. But the range of experience with and the context in, varies greatly. Each child can be helped to continue development of arithmetical understandings through activities that require them to describe, count, compare, order, measure, record, and prove the exactness of specific information. It involves vocabulary development, use of symbols, games, and appropriate materials which are selected by a teacher with an understanding of mathematics and how a young child learns.

6.) Music
Kindergartens need spontaneous as well as planned musical experiences to reinforce and facilitate concepts introduced to children through units of study. Individuality should be encouraged because every child will have his own way of making and responding to music. Rhythm, games, singing, dramatics, playing instruments, and moving to music are musical experiences planned to reinforce other content areas. These activities will become more complex throughout the year as children develop confidence, motor control and learn to express ideas. Music is a special content area that every child will enjoy if teachers maintain an experimental and creative attitude. Appreciation and sheer enjoyment are the first steps in attainment of these goals.

7.) Motor Development
An essential part of the total kindergarten growth process is the development of large and small muscles and motor control. A simple inventory of skills is of value in identification of possible developmental delays. Specific activities are then planned for guiding the child toward improvement. Since children experiment with all types of movement, this area will usually be pursued enthusiastically. Exposure to a wide range of inside and outside activities and games will develop not only physical strength, but cultivate the ability to pay attention, follow directions, instill habits of fair play, and encourage group social interactions. The key to success is a teacher who understands child growth and development as well as enjoys being a participant.

8.) Health Education
No other content area contributes to or takes away from the learning process as much as the health of a child. Stamina and endurance are dependent upon adequate nutrition and rest. All affect the child's ability to attend and ultimately grasp concepts. Even though parents carry the greater responsibility of teaching these concepts, the school experience must be filled with opportunities for learning how to maintain physical and emotional health. Charts and "weigh-ins" are helpful for emphasizing growth. Daily health checks by the teacher will often identify minor problems before they become major.

9.) Play
Play enriches all our curriculum even though it is actually not a content area. Special mention is made at this point because play is considered synonymous with leisure time. Knowledgeable early childhood staff realize it is "the work of the child" through which he/she prepares for adult roles. When guided by a teacher who believes this, a firm foundation for later studies is laid. All through the day, the routine is interspersed with small and large group play. Through observation of child activities, much is learned about each personality and past coping experiences. An environment which permits discovery (play) will be more likely to assist in the attainment of potentials. **(Almy, 1984)**

INTEGRATION OF CURRICULUM ACTIVITIES
Learning should be interwoven throughout the school day and throughout the whole curriculum. Skills taught at the receptive moment have an enhanced meaning to the child. A child asking to write his/her name may take a greater pride in this achievement and be more highly motivated than the same child if asked to perform the same at a "writing lesson." An array of learning centers permits all children to be actively learning at the same time so that activities are presented in the natural way children learn.

Integration of content areas means that most subjects are learned simultaneously. This differs from the classic upper grade instructional manner where the teacher alternates between working with a group of children in one particular subject while the rest of the class is doing quiet seat work, or instruting the entire class using a lecture method of instruction. The following excerpt clearly illustrates how concepts from many subjects area disciplines are integrated into a simple cooking activity. **(McCarthy and Huston, 1980)**

> **Suppose you and some of the children decide to cook scrambled eggs one day. If a recipe is involved, it may be read and explained before and during the activity. This involves an exercise in basic language and mathematical concepts. The group must decide which bowl, pan, and cooking utensils to use. Here, at the very least, you are dealing with logic and the rudiments of science. Counting eggs and measuring ingredients involve further contact with basic content information. Colors, weights, smells, tastes, textures, and shapes will probably be discussed. The origin of eggs might be of interest. As the eggs cook, some children may want to know about heat and how it cooks the eggs. Once the eggs have cooked, of course, they must be served. This involves one plate and a spoon or fork for each child and the portioning of eggs. If you think about it for a moment, these activities involve elementary, but very definite contact with the basic mathematics (one-to-one relationships, measuring, division, geometry) and science (biology, physics, chemistry). Furthermore, this activity provides a perfect opportunity for you to comment on the nutritive value of the food and on the digestive process, thereby bringing your pupils into contact with anatomy, biology, and the principles of health and nutrition.**

The potential for learning at different levels is enormous in any activity that captures and hold the child's interest. Frustration is guaranteed for those who favor drill and skill instruction that is presented in isolation and apart from the child's world.

WHAT IS THE PROCESS FOR DEVELOPING A SYSTEMATIC KINDERGARTEN CURRICULUM?

The process for developing a systematic curriculum is illustrated in the following flow chart:

A SYSTEMATIC KINDERGARTEN CURRICULUM

Stating a Program Philosophy

Formulating Program Goals

Outlining a Program Design

Assessing Entry Behaviors of Students

Expanding Program Design Into Program
Description Based on Student Assessment

Developing a Program Evaluation

STATING A PROGRAM PHILOSOPHY

The general program philosophy for kindergarten programs in Mississippi is given on page iv of this guide. After reviewing this philosophy, each administrator will find it helpful to develop a philosophy, reflective of the district, similiar to the one outlined in the **State of Mississippi Guidelines for Kindergarten (State Department of Education, 1984).** This can be written down and reviewed as the program matures.

FORMULATING PROGRAM GOALS

The realistic goals for kindergarten education are found on page v.

OUTLINING A PROGRAM DESIGN

The Mississippi School Commission on School Accreditation states the following:

> "The school shall have a written accountability and instructional management (AIM) plan developed jointly by teachers and administrators and approved by the school board. This plan shall provide a guide for effective instruction in each area of the school's curriculum.
> The school's AIM plan shall consist of three parts: the design of the instruction program, the description of the instructional program, and how the instructional program is evaluated." (p.12)

In An Administrator's Manual on Accountability and Instructional Management (Evans and Saterfiel, 1981), program design is defined as follows:

> "Program design is an outline of the content components of the curricula in an instructional program from the most general level to a more specific level. Program design provides the necessary function of a table of contents to the instructional program. Through program design, future program development will be initiated by inserting or deleting content components (p. 14."

Program design may be broken down into a hierarchy of subject area disciplines.

1.0 Language Arts
2.0 Mathematics
3.0 Science
4.0 Social Studies
5.0 Health and Physical Education
6.0 Music Education
7.0 Arts Education
8.0 Vocational Education
9.0 Special Education
10.0 ETC.

The program goals listed earlier can be adapted into a program design. While they are not in the same form as subject area listings in the other grades, one may still see how they can be utilized to write a program description.

1.0 Language Arts

K.1.1 **To help the child to enlarge his world of people, experiences, ideas, and things.**
K.1.2 **To help the child to increase competency and skills communication.**
K.1.3 **To help the child to develop a positive self concept.**
K.1.4 **To help the child to achieve intellectual growth as shown by maturation of thinking processes.**

2.0 Mathematics

K.2.1 **To help the child to enlarge his world of people, experiences, ideas, and things.**
K.2.2 **To help the child achieve intellectual growth as shown by maturation of thinking processes.**

3.0 Science

K.3.1 **To help the child to enlarge his world of people, experiences, ideas, and things.**
K.3.2 **To help the child achieve intellectual growth as shown by maturation of thinking processes.**

4.0 Social Studies

K.4.1 **To help the child to enlarge his world of people, experiences, ideas, and things.**
K.4.2 **To help the child increase competence in dealing with emotional feelings and social situations.**
K.4.3 **To help the child to develop trusting relationships.**
K.4.4 **To help the child develop a positive self concept.**
K.4.5 **To help the child achieve intellectual growth as shown by maturation of thinking processes.**

5.0 Health and Physical Education

K.5.1 To help the child to increase the skills involved in physical coordination and body mastery.
K.5.2 To help the child increase competence in self-direction and independence.
K.5.3 To help the child develop a positive self concept.

6.0 Music Education

K.6.1 To help the child to develop his/her natural curiosity and his/her creative potential.
K.6.2 To help the child to develop a positive self concept.

7.0 Arts Education

K.7.1 To help the child to develop his/her natural curiosity and his/her creative potential.
K.7.2 To help the child develop a positive self concept.

8.0 Vocational Education

K.8.1 To help the child to increase competence in self-direction and independence.
K.8.2 To help the child develop a positive self concept.

9.0 Special Education

10.0 ETC.

K.10.1 To help the child to increase competence in self-direction and independence.
K.10.2 To help the child develop a positive self concept.
K.10.3 To help the child to achieve intellectual growth as shown by maturation of thinking processes.

"K" is indicative of kindergarten.

ASSESSING ENTRY BEHAVIORS OF STUDENTS

Guidelines and suggestions for student assessment are presented in the Assessment Section of this book.

CLASSROOM ARRANGEMENT AND EQUIPMENT

1. Room arrangement is such that there are several distinct areas for interest / learning centers such as those listed below.

   These centers will house the proper kinds and adequate amounts of activities, equipment, furniture, and materials for their full implementation.

   - Mathematics ______
   - Language Arts ______
   - Science ______
   - Cooking ______
   - Housekeeping / Dramatic Play ______
   - Library ______
   - Block Building ______
   - Music and Movement ______
   - Creative Art ______
   - Water and Sand Play ______
   - Woodworking ______

2. Adequate amount and variety of materials and equipment are stored where they are used. ______

3. Adequate space is provided for displaying and storing children's work and belongings. ______

4. Bathroom with child-level fixtures opening directly off each classroom or within 125 feet of that classroom. ______

   A sink in each art area or in close proximity of the art area in the classroom ______

   Easily cleaned tile flooring in each art area ______

   Electrical outlets equipped with safety covers and located every 10 feet within the classroom ______

   Bulletin boards, chalkboards, counters, etc. built at appropriate heights for children ______

   Carpeting throughout each room except in the art area ______

   Ample storage space for supplies, materials, and equipment ______

   A covered outdoor area for play, woodworking table, and sand and water tables ______

   Outdoor storage facility for outdoor equipment ______

5. Building and room design and arrangement accommodates children with vision, hearing, physical, and mental impairments. ______

CLASSROOM DAILY ROUTINE

1. The general daily routine is consistent from day to day so that children:

    know what to expect ______

    know what is expected of them. ______

2. Children have adequate time to work on learning center activities which they have chosen. ______

3. Teacher provides assistance to children who:

    need help getting started in an acitivty of their choice ______

    ask for help as they are working ______

    don't seem to know what to do next. ______

4. Teacher is available to:

    verbally interact with children as they work ______

    help gather necessary materials ______

    supervise and maintain positive and appropriate classroom learning environment ______

    observe children for formal and/or informal evaluations. ______

5. Children clean up own work areas and return materials to proper places. ______

6. Teacher and children converse about completed activities. ______

7. Children interact in small groups in order to:

    get to know one another ______

    learn to work in group situations ______

    experience being leader at times in addition to being a follower. ______

8. Children and teacher are actively involved in outside activities where large muscle movement is emphasized (active indoor games are used in inclement weather). ______

9. Children and teacher are involved in large group circle time activities which relate to individual, small group, and unit theme experiences. ______

    Circle time is used for group games, songs, dance, storytime, or planning a special event. ______

    There is enough space for everyone to move and sit together comfortably. ______

Each child participates in circle time with the teacher providing opportunities for less assertive children to join in. ______

Children are aware of the limits and expectations for the large group activities. ______

DAILY PLANNING

1. Kindergarten teachers plan on a daily basis. Where there is more than one teacher this planning is done as a team. Daily planning includes the following components:

   discuss children's actions concerning the success or failure of a particular activity ______

   relate these successes or failures directly to specific concepts or skills ______

   expand on successful activities and delete or modify unsuccessful activities. ______

2. To facilitate daily planning procedures:

   set aside regular time each day to plan ______

   set a specific focus for planning and evaluation ______

   modify evaluation and planning forms as needed ______

   after pinpointing a problem, generate strategies for dealing with it ______

   if ideas do not surface within the team concerning solving a problem, then contact appropriate support personnel. ______

ACTIVE LEARNING

1. Teacher emphasizes active learning by:

   providing materials that encourage active exploration such as those which children can manipulate (touch, see, hear, taste, discuss) ______

   encouraging children to do things on their own ______

   helping children think of alternatives rather than problem-solving for them. ______

LANGUAGE

1. The classroom is arranged and equipped to facilitate language development by:

   encouraging children to verbally interact with peers as they move freely among the learning centers throughout the school day ______

   encouraging children to verbally interact with the teacher who is accessible as he/she moves throughout the room. ______

2. Teacher communicates with children in order to provide opportunities for children to verbalize their work plans, what they actually did or are doing, and what they are going to do next. ______

3. Teacher helps children to communicate positively with peers, both verbally and non-verbally. ______

4. Teacher encourages active listening in children, as part of the total communication process, by attending carefully to what the children say to her/him. ______

5. Teacher acknowledges and respects each child's language or dialect and communicates non-verbally in a positive manner if language is not mutually understood. ______

PRE-NUMBER SKILLS (Classification, Seriation, Counting, Spatial Relations, and Time)

1. **Classification** - Classroom is equipped with a variety of materials children can classify. ______

   Children are expected to classify as they locate and return equipment and materials to their proper places. ______

   Teacher encourages the development of classification skills by verbalizing with children about similar and different attributes of objects. ______

2. **Seriation** - Classroom is equipped with materials and objects which can be compared and ordered. ______

   Teacher encourages the development of seriation skills in all parts of the school day by talking with children and asking them questions about size and relationships. ______

3. **Counting** - Classroom environment is planned in order to promote concepts of:

   continuous materials ______

   discontinuous materials ______

   one-to-one correspondence ______

   sets. ______

   Teacher encourages the development of counting skills in routine activities such as games and snacktime. ______

4. **Spatial relations** - Materials and activities are provided which permit children to explore and describe spatial relations in:

   objects which fit together and come apart ______

   objects which can be re-arranged and/or re-shaped ______ a variety of pictorial scenes photographed or drawn from different spatial viewpoints. ______

5. **Time** - Classroom materials and instruction are provided which allow children to experience time units and time sequences such as:

clocks, calendars, and seasonal concepts which encourage understanding of beginning and end of different units of time ______

discussions of daily routine and occurrences in stories and various events. ______

OTHER QUESTIONS ADMINISTRATORS MIGHT ASK CONCERNING CURRICULUM

1. **What about the teaching of reading to kindergarteners?**
The research of Jean Piaget (1969) has clearly shown that most children's minds are not ready for abstract thought until approximately 6 years of age. Until children move through certain developmental steps brought about by maturation and experience, formula reading attempts will only provide frustration. **(Leeper, et al 1984)** Attempting reading instruction to a child who has not developed a wide language comprehension, adequate visual skills, and had many experiences with identification of environmental words, is usually frustrating and uninteresting.

2. **What about the use of workbooks?**
John Dewey's concept of learning by doing is still as true today as it was 40 years ago. To acquire lasting concepts a child must be an active participant. Piaget (1969) reminds us that a child will not utilize abstract concepts until this development has been reached. Young children have more difficulty getting as much information from the printed page than they do from the "real thing" (concrete objects). Lengthy sessions with pencil in hand, serve to "turn children off" rather than motivate.

3. **Should the kindergarten curriculum be planned much like the first grade curriculum but with less content?**
Today, when teachers and administrators are under greater pressure than ever before, to add more to the curriculum at earlier ages, one needs to consider what "watered-down" first grade experiences are doing to five year olds.

In situations where children have been placed under stress to perform, frequently stressful signs of activity are observed (wiggling, stuttering, hair-twisting, i.e.) Many classrooms are void of the excitement of learning but filled with frustration and short attention spans. It seems then, that the important question to be answered is "What experiences can we give these children that will assist them toward independence, while building positive attitudes toward themselves and the school?". Asking this type question causes us to place "the child" as focal point while giving integrated curriculum activities top priority.

4. **How can the school help a child make the transition from home to school during this beginning school experience?**
Leaving the confines of a warm family atmosphere to spend the day in one room of unfamiliar faces can be a traumatic experience. This may be avoided if short visits are completed (with parent) where explanations are given concerning what to expect. If a rotation of students visiting on separate days is planned, adequate attention and explanations can be given.

An atmosphere is composed of many things but paramount is the presence of a climate of acceptance and caring. The child quickly learns to feel secure and begins the readiness quest.

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INSTRUCTIONAL MANAGEMENT (AIM) PLAN

SAMPLE AIM PLAN

ACCOUNTABILITY AND INSTRUCTIONAL MANAGEMENT PLAN

SUBJECT AREA	PROGRAM DESIGN	OUTPUT (OBJECTIVES)	PROCESS (TEACHER-STUDENT ACTIVITIES)	INPUT (RESOURCES)	EVALUATION
		The child will be able to:			
1.0 Language Arts	0.1.1 To help the child enlarge his world of people, experiences, ideas and things.	0.1.1.1 identify five pictures of community workers and name their jobs.	0.1.1.1 ask the child to identify pictures of community workers and name the profession of the worker.	0.1.1.1 Community Worker Picture Cards	0.1.1.1 Directions. Tell me the names of the community workers in these pictures. What are their jobs? Test Item: Community Worker Picture Card. Mastery Level Observe for 85% Mastery
2.0 Mathematics	0.2.1 To help the child achieve intellectual growth as shown by maturation of thinking processes.	0.2.1.1 count ten objects in a set.	0.2.1.1 ask the child to look at a picture of community workers and other objects and count only the community workers.	0.2.1.1 Picture showing at least 10 community workers and other miscellaneous objects	0.2.1.1 Directions. Look at this picture. Tell me how many community workers you see. Test Item: Picture depicting community workers and other objects Mastery Level. Observe for 100% Mastery
3.0 Science	0.3.1 To help the child to enlarge his world of people, experiences, ideas and things.	0.3.1.1 touch and use a stethescope, odoscope, and opthalmascope.	0.3.1.1 discuss the tools of one community worker - a doctor. Show how a stethescope, odoscope, and opthalmascope are used, then let each child have a turn to do the same.	0.3.1.1 Stethescope, odoscope, opthalmascope	0.3.1.1 Directions. Listen to your friend's heartbeat using the stethescope. Look in your friend's eyes using the opthalmascope. Look in their nose using the odoscope. Test Item: Stethescope, odoscope, opthalmascope. Mastery Level: Observe for 100% Mastery
4.0 Social Studies	0.4.1. To help the child develop a positive self concept.	0.4.1.1 experience a feeling of well-being by making a picture for a community worker.	0.4.1.1 ask each child to draw or paint a card, picture, or poster for a community worker in the school and then deliver it with the class.	0.4.1.1 Paper, Crayons, Markers	0.4.1.1 Directions. Make a picture for one of the community workers at our school. Test Item: Completed picture. Mastery Level Observe for 100 % participation.
5.0 Health and Physical Education	0.5.1 To help the child to increase the skills involved in physical coordination and body mastery.	0.5.1.1 have practice putting on and taking off shoes of different community workers (Chenfeld, 1983)	0.5.1.1 allow each child to role-play the activities of different community workers by having a "Shoe Rack" of shoes such as cowboy boots, fisherman's boots, fire fighter's boots, etc. Let the child practice taking on and off these shoes and putting back on his own shoes.	0.5.1.1 Shoes, Rack	0.5.1.1 Directions. Take off your shoes and put on the shoes of a community worker. What kind of worker wears those shoes? Show me how you can put on your own shoes again. Test Item. The child's own shoes and the community worker shoes Mastery Level. Observe for 100% Mastery.
6.0 Music Education	0.6.1 To help the child to develop his/her natural curiosity and his/her creative potential	0.6.1.1 sing songs using old tunes but with new words as community workers as the theme.	0.6.1.1 As a group activity, have the children help in making up new songs about community workers using old tunes such as "Farmer In the Dell", "I've Been Working on the Railroad", etc.	0.6.1.1 Familiar Tunes	0.6.1.1 Directions: Let's sing "I've Been Working on the Railroad". Now, help me make up a song about fire fighters, bus drivers, librarians, etc. to that tune. Mastery Level: Observe for 80% Mastery.
7.0 Arts Education	0.7.1 To help the child develop his/her natural curiosity and his/her creative potential	0.7.1.1 make a collage of community workers.	0.7.1.1 ask the child to find and cut out pictures of community workers from magazines, catalogues, and newspapers. With markers, have the children print or help them print the names of the different workers over the pictures.	0.7.1.1 Magazines, Catalogues, Newspapers, Glue, Paper	0.7.1.1 Directions: Look for pictures of community workers. Cut them out, and glue them on your paper. What kind of worker did you find? Write the name of the worker beside the picture. Test Item: Pictures cut from magazines, newspapers, etc. Mastery Level: Observe for 100% Mastery.
8.0 Vocational Education	0.8.1 To help the child to increase competence in self-direction and independence.	0.8.1.1 touch and handle tools in a Our Special Visitor or Work Discovery Center Area (Fleming & Hamilton, 1977).	0.8.1.1 ask the child to explore tools displayed, provided, and explained each day by a parent, special community resource person, or teacher. Examples are a Bake Center, Workbench, Sewing Center, To Her Test, and Health Care Center.	0.8.1.1 Area for display Special Tools Resource person for items	0.8.1.1 Directions: Today we have special items displayed in the Work Discovery Center. Sometime this morning, take a turn in using these tools that the baker uses. Test Item: Tools of Community Workers Mastery Level. Observe for 100% Mastery.

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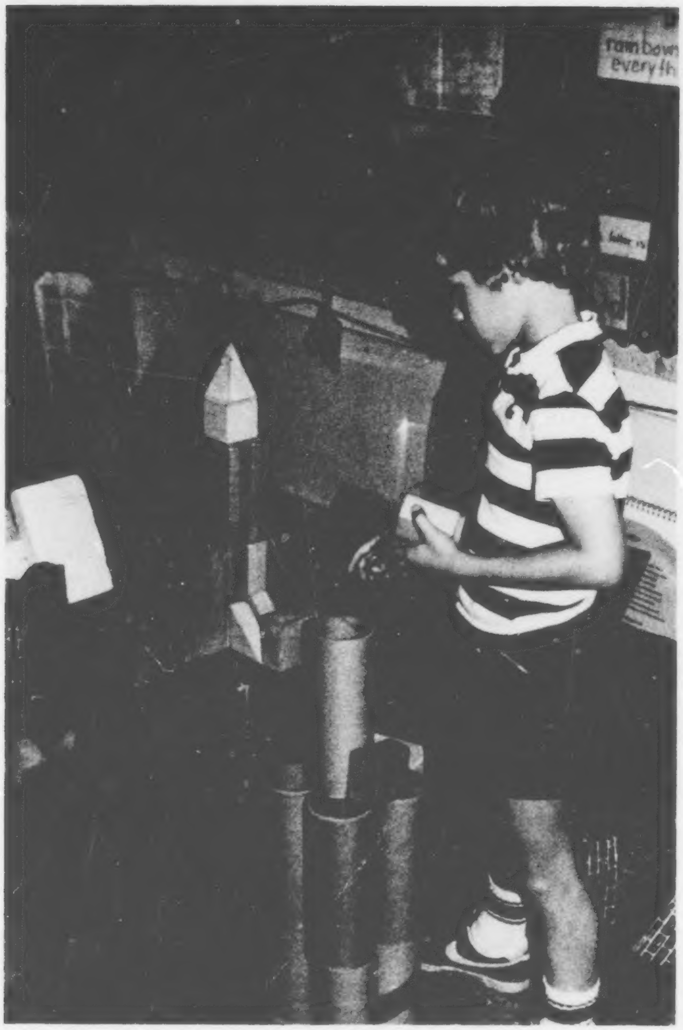
Equipment and Materials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EQUIPMENT AND MATERIALS

The kindergarten classroom should be planned with areas of interest called learning centers. Centers usually planned for young children include art, science, math, language, arts, library, blocks, housekeeping, and music. Others suggested are woodworking, cooking, and sand and/or water play centers. The outdoor space is also an important learning center. These centers allow the children to make choices, move freely and independently, learn to cooperate and communicate with others, control their own behavior, and learn through first hand experiences. In doing so, the child develops a positive attitude about himself, school, and learning.

The equipment and materials found in each center dictate the depth of involvement children may experience as they interact with various media in the completion of tasks. **(NAEYC, 1983)** It is imperative that appropriate materials be obtained for the various centers so program objectives may be accomplished. Listed below is a brief review of the basic suggested learning centers and purposes of each. Following the review is a breakdown of equipment and materials that are essential, strongly recommended, and suggested for each.

LANGUAGE ARTS CENTER

1. Increases vocabulary growth
2. Develops listening skills
3. Develops skills for pre-writing
4. Develops reading readiness skills (such as visual discrimination, letter recognition, and rhyming word concepts)
5. Develops fine motor skills
6. Develops oral language skills

MATH CENTER

1. Develops understanding of numbers and number relationships
2. Develops rational counting skills
3. Develops positional understandings such as over, under, beside
4. Develops mathematical vocabulary
5. Develops concepts concerning time and money
6. Develops fine motor skills
7. Develops classification skills
8. Develops seriation skills
9. Develops geometric skills

LIBRARY CENTER

1. Develops an appreciation of good literature
2. Encourages an interest in and respect for books
3. Strengthens visual perception
4. Develops reading readiness skills (such as reading from left to right and from top to bottom)
5. Develops imagination
6. Increases vocabulary and attention span

SCIENCE CENTER

1. Develops observation and discrimination skills
2. Develops concepts through first-hand experiences
3. Develops sense awareness
4. Develops respect for the environment
5. Provides opportunities for care of plants and animals
6. Provides a foundation for later learning in physics, chemistry, biology, geology, astronomy, etc.
7. Encourages a child's curiosity

BLOCK BUILDING CENTER

1. Provides practice with social skills
2. Develops gross and fine motor skills
3. Teaches mathematical concepts (shape, size, balance, counting)
4. Increases creativity and decision-making skills
5. Enhances social studies development
6. Develops visual discrimination skills
7. Provides an opportunity for dramatic play
8. Increases communication skills and oral vocabulary

The block center should provide enough open space for several children to work together. An area rug will provide a good surface for constructions as well as keeping down the noise level of the center. Large hollow blocks should be provided as well as smaller unit blocks. Low shelves with the outlines of the blocks to be stored there will make clean-up time easy as well as providing a good visual discrimination activity.

HOUSEKEEPING / DRAMATIC PLAY CENTER

1. Provides an opportunity to role play home experiences
2. Increases social development and communication skills
3. Develops small and large muscle coordination
4. Develops self-awareness as well as better understanding of the immediate environment
5. Develops visual discrimination skills
   The housekeeping center should be located in a quiet corner or separated in some way from the other centers.

ART CENTER

1. Develops creativity and imagination
2. Develops small and large muscle skills
3. Develops color concepts
4. Provides for release of positive and negative feelings
5. Increases sense awareness
6. Develops reading readiness skills
7. Develops pre-writing skills

MUSIC CENTER

1. Develops an appreciation for different types of music
2. Develops a feeling for and sense of rhythm
3. Develops responsibility and care in operating record player and using rhythm instruments
4. Strengthens cognitive skills and conceptual development
5. Strengthens auditory discrimination
6. Develops small and large muscle coordination
7. Provides an opportunity for creative expression through movement, rhythm activities, and use of instrument and song

SAND / WATER PLAY CENTER

1. Develops sense awareness
2. Develops concepts involving space, measurement, volume
3. Develops gross and fine motor skills
4. Provides opportunities for problem solving and creative thinking
   This center can be set up daily inside or on the playground, or can share time with the science and/or math activities.

80

WOODWORKING CENTER

1. Develops large and small muscle coordination
2. Develops creativity
3. Increases sense awareness
4. Develops eye-hand coordination
5. Develops science and math concepts
6. Teaches proper and safe use of tools
7. Develops problem solving skills
8. Develops social and communication skills

A carpentry or woodworking center can be created in a corner of the room, in an area separated from the classroom or on the playground. This area is one that needs close adult supervision.

COOKING CENTER

1. Provides rich sensory experiences
2. Provides first hand opportunities to practice skills in math, reading, science, and communication
3. Provides good nutritional information and experiences
4. Develops fine motor skills
5. Develops awareness of health and safety factors involved in cooking
6. Develops social skills

BASIC EQUIPMENT

Furniture should be of appropriate height for children, with chairs so that all children's feet can touch the floor. Appropriate height must be considered in planning for drinking fountains, chalkboards, and bulletin boards. Classroom doors and walls should be bright and cheerful. Adequate storage space should be provided for the abundance of materials and equipment with low, open shelving and some closed storage above children's reach. Individual cubicles should be provided for children's personal belongings.

Essential

Children's chairs
8" - 14" chairs
Rectangular tables of adjustable heights
Round tables of adjustable heights
Teacher desk and teacher chair
Block storage center - mobile
2 multi storage units - mobile
Storage shelves
Plastic bins or tote trays to store manipulatives
File cabinets
Bulletin boards
Record player
Film strip projector
Cassette tape recorder
Fans or air conditioner
Wooden puzzles
Puzzle racks for storing puzzles
Pegboard and pegs
Interlocking blocks
Beads and string
Stacking toys
Lotto games
Storage cabinet

Strongly Recommended

Sink with running water
Rest mats (washable covers) or cots

Suggested

1 kidney shaped table - 1 table for every 4 to 6 children
Wooden locker units and tote trays - 1 per child
Adult rocker
Flannel board
Puppet stage
Additional teacher's chair
Lacing boards
Table blocks
Color and animal dominoes
Wooden zoo and farm animals

TEACHER MATERIALS

Essential

1 pair 10" shears
Paper punch
Scotch tape and dispenser
Desk wastebasket
Paperclips
Pencils and pens
Chalk and erasers
Poster paper
Yardstick
File folders
Stapler and staples
Masking tape
Straight and safety pins
Magic markers
Paper fasteners
Erasers
Rubber cement
Ruler
Self-sticking stars
Plan book

OUTSIDE EQUIPMENT

Essential

Jump ropes - 5 long, 20 short
10 rubber balls, 6", 8", 10"

Strongly Recommended

Sand boxes with sand

Suggested

Climbing apparatus
Slide
Swings - rubber or canvas seats
Hoops (19" - 26")
Balance beams
Parachute
Riding toys
Wagons

Much outdoor equipment may be built or improvised by high school shop personnel, parents, or volunteers (refer to the Learning Environment and Appendices B and C).

MATERIALS FOR TEACHER-MADE LEARNING MATERIALS

Scissors (Best with sharp point for teacher use)
Fadeless Art Paper
Poster Board
Manila File Folders
Rubber Cement
Fine Line Markers
Ruler or Yardstick
Wallpaper Books
Construction Paper
Colored File Folders
Glue Sticks
Markers (Both Watercolor and Permanent)
Clear Contact Paper
Patterned Contact Paper

Solid Colored Contact Paper

Stick on Letter and Numbers (Several sizes, both upper and lower case letters)
Stick on Dots
Art Eraser
Picture File
Magazines (for pictures)
Hole Punch
Paper Bags
Yarn
Buttons
Cans with lid (for storage of game pieces)
Thumb tacks

Manila Envelopes (Small ones for storage of game pieces on back of folder games, larger ones for storage of larger games)

Stick on Seals (Animals, Flowers, Birds, etc.)
Patterns for Letters and Numbers
Coloring Books for Patterns
Old Workbooks and Textbooks (for pictures)
Felt
Ziplock Bags (for storage of game pieces)
Fabric scraps
Craft sticks
Boxes (for storage of game pieces)
Straight pins

Much of the equipment and materials listed in the following centers are necessary in more than one center. Although they are listed in each center in which they are needed, many of them may be shared by several centers. For example, cassette recorders are important equipment in the language arts, library, and music centers. However, one or two recorders may be shared by all three centers. The names given in parenthesis beside items listed below indicate suggested brand names or companies where the material may be found. However, these are only a few of the sources from which they are available.

LANGUAGE ARTS LEARNING CENTER

Participation in the language arts centers helps the child develop competence in communication skills. Activities in the center promote listening skills, speaking skills, writing readiness, and reading readiness.

Essential
Flannel board and cut-outs
Experience chart and chart holder
Felt tip markers or crayons
Picture matching games
Filmstrips and filmstrip viewer with or without narration
Containers for crayons and markers
Variety of books, newspapers, and magazines
Bulletin boards
Recordings
Films (16 mm)
Language Games (Examples: Lotto, picture-matching, rhyming games, visual discrimination games, beginning sound games, and auditory discrimination games)
Cassette recorders

Puppets and puppet stages
Oak tag sentence strips
Picture file
Small portable chalkboard and chalk
Puzzles and puzzle storage
Upper and lower case wooden alphabet letters
Shelves for storage
Headphones and jacks
Blank cassette tapes
Film projector
Record player

Strongly Recommended
Collections of objects that rhyme
Sandpaper letters

Viewmasters and disks
Rocking chair (for teacher)

Suggested
Paper of different colors and sizes
Overhead projector and supplies

MATH CENTER

Active participation in the math center helps children develop problem solving techniques, categorizing and sorting skills, spatial abilities, and an understanding of number concepts and relationships. Manipulation of objects allows the child to internalize geometric concepts and mathematical vocabulary.

Essential

Geoboard, geobands (rubber bands), and geoboard sequence and pattern
Design cards (Ideal Company)
Measuring sets (standard and metric)
  jars of assorted sizes and shapes
  measuring spoons and cups
  water or six pounds of rice or millet
  plastic tub or container for water or grain
Pegboards, pegs, and patterns (available from Ideal, Playskool, Childcraft Companies)
Attribute blocks (Creative Publications)
Number puzzles, locking numerals (Ideal, Childcraft Companies)
Dominoes (giant beaded, animal, color, tactile, number, shape) (Holbrook, Childcraft, Playskool Companies)
Calendar (Milton Bradley, Kenworthy, Childcraft Companies)
String beads, strings, and design cards (Ideal, Playskool, Childcraft Companies)
Shape and discrimination games - Examples:
  Wipe off cards and markers (Ideal, Frank Schaffer, Childcraft Company)
  Color and Shape Lotto (Ideal Company)
Fit-a-Shape (Lauri Company)
Candy Land (Milton Bradley Company)
Fit-a-Space (Lauri Company)
Memory (Milton Bradley Company)
Fit-a-Size (Lauri Company)
Geometric Sorting Board (Childcraft Company)
Shape Sorter (Childcraft Company)

Number and counting games - Examples:
  Cross the Brook (Ideal Comapny)
  Rod and Counters (Childcraft Company)
Write-off (Childcraft Company)
Number Match (Childcraft Company)
Number-ite (Childcraft Company)
Numberland (Childcraft Company)
Objects used for counting
Storage shelves and containers

Strongly Recommended

Parquetry blocks and designs (McGraw-Hill, Creative Publications, Childcraft, Ideal, Playskool Companies)
Unifix cubes (Educational Teaching Aids, Creative Publications, Addison-Wesley Companies)
Balance scale (Ideal, Weber Costello, Enrich/Ohaus, Childcraft Companies)
Clock (Ideal, Milton Bradley, Judy Companies)
Cuisinaire rods or other proportional number blocks, patterns, and task cards
Thermometers (Ideal, Childcraft Companies)
Walk on number line (Instructo, Childcraft Companies)
Weights (Enrich, Ohaus Companies)
Peg numbers (Lauri Fit-a-group; Childcraft Companies)
Numeral jigsaw, Number Plaques (Childcraft)
Flannel board (may be shared with language arts center) and assorted flannel
Cutouts for math (Instructo, Milton Bradley Companies)
Kinesthetic numerals
Realistic play money and real coins (Ideal, Instructo, Milton Bradley Companies)

Colored cubes or pattern blocks and pattern cards (Ideal, Playskool Companies)
Sorting boxes, trays
Stencils, or templates (numerals, geometric shapes) (Ideal Company)

Suggested
Timer
Compass
Graduated circles, squares, triangles (Lauri Company)
Wooden sorting box with geometric shapes or geometric sorting board
Plastic beads (500 assorted in 6 colors)
Cash register (Ideal Company) (may be shared with housekeeping center)
Rubber coin stamps and stamp pad (pyramid Company)
Tangrams and task cards
Magnetic board, numerals and shapes (Childcraft Company)

It is essential that some items from the **Strongly Recommended** category be selected. A variety of manipulatives must be available, although no particular item in this group is essential.

LIBRARY CENTER

The library center is designed to promote a child's interest in and respect for books and literature.

Essential
Area Rug
Child sized rocking chair
Shelves
Cassette tape and book set
Record player
Blank cassettes
Puppets
Pillows
Collection of appropriate books for children
Records
Cassette tape recorder / players
Magazines
Flannel board and storage kits

Strongly Recommended
Head phones and jacks

Suggested
Display rack for books and magazines

Guidelines For Purchasing Books

1. Young children should be introduced to various types of literature recommended for young children.
    - Picture books with few words
    - Mother Goose Rhymes
    - Books of poetry
    - Information books
    - Concept books (number, alphabet)
    - Fairy tales
    - Books dealing with everyday experiences
    - Humorous books
2. Select books with attention given to the illustrations. The content, moods, and feeling of the illustrations should reflect the plot and tone of the story.

3. Format

- Book bindings should be sturdy and firmly stitched.
- Covers should be attractive and appealing to the child.
- Inexpensive books should be purchased as well as those of better quality since excessive use of favorites would necessitate several copies.
- The pages should be of strong, heavy paper.

4. Story Content

- The story and illustrations should be believable within confines of the plot.
- The plot should be simple and about familiar happenings.
- Stereotypic portrayals in the plot of ethnic groups and/or sexes should be avoided.

SCIENCE CENTER

An effective science center helps the child seek solutions to problems, acquire knowledge and understanding of science concepts, develop an understanding of the environment, explore his interests and satisfy his curiosity. The child accomplishes those things through observing, classifying, experimenting, inferring, predicting, measuring, and communicating.

Essential

Aquarium or fish bowl
Terrarium or large clear container with top
Dry cell batteries and insulated wires
Flashlight and batteries
Hot plate
Weights
Magnifying glasses of varying strengths
Collections: Insect, Rock, Feather, Seeds, and Plants
Different kinds of soil
Measuring tape
Sensory items to smell, taste, touch and hear.
Fish
Magnets
Prisms
Measuring cups and spoons
Balance scales
Fish food
Thermometer (real)
Science kits
Microscope
Pans, kettles, and pot holders

Strongly Recommended

Compass
Ant farm
Wood collection
Containers of various sizes and shapes
Kaleidoscope
Shell collection
Binoculars
Collected artifacts, such as bird's nests, wasp nests, and bones
Sponges
Hand mirrors
Tuning fork
Stethoscope
Flower pots, vases
Locks and keys
Pulley and rope

Suggested

Caged gerbils or hamsters
Pictures and displays relating to science
Objects that float and don't float
Animal food
Incubator and supplies

BLOCK CENTER

Blocks are the prime instructional material in a kindergarten. This area holds the potential for the beginnings of a systematic, flexible, visual education for boys and girls. It should be located in a spacious part of the room and away from the quiet activity areas.

Essential
Unit block set (190 pieces minimum)
Lincoln logs
Assorted smaller blocks
Block storage shelf or cart
Wooden trucks, cars and other vehicles
Legos

Strongly Recommended
Street and traffic signs
Tinker toys
Zoo and farm animals and small people (rubber, wooden or heavy plastic)

Suggested
Large hollow blocks
Extra large plastic blocks
Wooden vehicles large enough for a child to ride
Minature village
Bristle blocks
Center area should be partially carpeted

HOUSEKEEPING / DRAMATIC PLAY

The housekeeping / dramatic play area is the place for pretending and make-believe. It helps the child develop competence in dealing with emotional feelings and social situations.

Essential
Kitchen play furniture (stove, refrigerator, sink, table and chairs) One unit may combine several of these pieces.
Aluminum cooking set
Table setting
Metal mirror
Dolls and doll clothes
Community helper hats for role playing
House cleaning sets
Telephone
Tea set
Ironing board and iron (wooden)
Doll bed
Role play hats
Assorted male and female clothing, shoes and accessories for dress-up
Storage shelves and/or boxes
Hand puppets (commercially or homemade)

Strongly Recommended
Doll carriage
Doll highchair
Child-sized rocking chair

Suggested
Bake set
Kitchen cabinet
Cash register and play money
Finger puppets
Play toaster
Doll house and furniture
Play store / puppet stage
Community helpers materials, such as doctor kit
Cereal boxes, labeled cans and other food containers (empty), area dividers or screens
Center area should be carpeted unless water is used in sink for washing dolls, dishes, etc.

ART CENTER

Participation in the art center should be a small group activity for no more than seven (7) or eight (8) children at a time. The creative art center will contain activities to assist the child in developing physical coordination, creativity, sense awareness, and aesthetic values. The following list of materials should supply one class of twenty-two (22) children.

Essential

- Painting Brushes:
  - ¼" wide, long handled (9)
  - ½" wide, long handled (9)
- Crayons:
  - 8 color boxes or large wax crayons (may be purchased in bulk) (44 boxes)
- Finger Paint:
  - Ready mixed
  - Red (2 jars)
  - Blue (2 jars)
  - Black (1 jar)
  - Yellow (1 jar)
- Glue:
  - Elmer's (1 gal. containers) (2 gal.)
- Paint:
  - 1 lb. cans powder paint
  - Red (1 doz. cans)
  - Blue (1 doz. cans)
  - Yellow (1 doz. cans)
  - Green (1 doz. cans)
  - Orange (1 doz. cans)
  - Purple (½ doz. cans)
  - Brown (½ doz. cans)
  - Black (½ doz. cans)
  - White (½ doz. cans)

- Paint container
- Easels (double sided) (2)
- Plastic aprons or smocks (8)
- Paste (individual with spreaders)
- Shelves for storage
- Masking tape
- Scotch tape
- Sponges of various shapes and thicknesses
- Liquid detergent for mixing paint
- Paper towels

- Paper:
  - newsprint, 18" x 24" (500 sheets per package) (5 packages)
  - manila, 12" x 18" (500 sheets per package) (1 package)
  - 36' white wrapping paper, 1 roll
  - colored construction (12" x 18") packages:
  - Black (2 packages)
  - Red (4 packages)
  - Yellow (5 packages)
  - Blue (4 packages)
  - Assorted (3 packages)
  - Green (5 packages)
  - Purple (2 packages)
  - White (2 packages)
  - Orange (3 packages)
  - Brown (1 package)

- Scissors:
  - 4" blunt or medium point quality scissors (22)
  - lefty scissors (4)
  - teacher's, large (1)

- Starch:
  - liquid prepared (2 - 5 gallons)
  - (Dry tempera can be added to liquid starch to make fingerpaint as well as using it to mix with dry tempera for easel paint.)

- Homemade play dough
- Water color markers
- Poster Board

Strongly Recommended

- Painting brush: (in addition to those that are essential)
  - ¼" wide, long handled (9)
  - ½" wide, long handled (9)
  - water-color brushes (18)
- Chalk, extra large colored sticks (1 box)
- Fasteners, brass paper fasteners (4 boxes)
- Glue
  - glue sticks (11 sticks)
  - rubber cement (small) (3 jars)
- Paper:
  - newsprint 12" x 18" (500 sheets per package) (2 packages)
  - manila, 8" x 12" (500 sheets per package) (1 package)
- Tissue paper:
  - assorted color package (100 sheets, 20" x 30") 5 each of 20 colors (1 package)
- Crepe paper:
  - Varigated (1 skein)
  - Yellow (1 skein)
  - Blue (1 skein)
  - Hole punch (1 - 5)
  - Wheat paste or wall paper paste for paper mache
  - Red (1 skein)
  - Green (1 skein)
  - Black (1 skein)
  - Pipe cleaners (colored)

Suggested

- Large (house paint) brushes (3)
- Clay:
  - Plasticine or oil base (1 lb. package), (4)
- Glue:
  - library paste (small), (3 jars)
  - glue sticks (11 sticks)
- Paper:
- White drawing paper (500 sheets per package) (1 package)
- Fabric crayons
- Fadeless bulletin board paper
- Bordette (for bulletin boards)
- Pencils
- Area should be tiled and near a source of water

MUSIC CENTER

Children may develop motor coordination, an appreciation of music, a sense of rhythm and tone, and a basic knowledge of musical instruments in the music center. A variety of rhythm instruments from those listed below may be purchased or made by students and/or teachers.

Essential

Record player
Cassette recorder
Records (various types)
Cassette tapes (blank and prepared)

Basic rhythm instruments (bought and/or homemade) including as many as possible of the following. Provide enough instruments for every child to participate at the same time.

Triangle
Tambourine
Rhythm Sticks
Cymbals
Sound Blocks
Maracas
Wrist Bells
Drums
Sand Blocks
Notched Rhythm Sticks
Claves
Rattles and Shakers
Ankle Bells
Jingle Bells

Earphones
Songs Written on Chart to play and sing
Shelves
Carpet or Rug

Strongly Recommended

Piano
Autoharp (with cards of familiary songs to play)
Portable Chord Organ (with cards of familiar songs)
Other Musical Instruments (guitar, ukulele, recorder, etc.)
Xylophone
Large sheets of paper (For children to express their feelings to music)
Crayons or markets
Pictures of Instruments

Suggested

Colored scarves or streamers
Colored hoops or circles
Feathers
Radio
Stories of Composers
Model of staff and notes, separate notes to match and read

Materials to Make Homemade Rhythm Instruments

Small boxes like cigar boxes and milk cartons
Rubber Bands
Bottles
Bottle caps
Round cereal boxes, potato chip cans, coffee cans
Cardboard tubes
Sandpaper
Aluminum pie pans
Wooden blocks
Dowel Rods
Pebbles, dried beans, rice, seeds

SAND AND WATER CENTER

Beginning math and science concepts may develop through the child's participation in the sand and water center. This area provides opportunities for problem solving and creative thinking in a small group setting.

Essential

Sand and/or water table, galvanized tub or other large container such as baby bath tub (Learning Products, TheraPlay Products, Ideal, Childcraft Companies)
Containers of various sizes with different sized openings for measuring and pouring
Funnels of different sizes

Shovels and/or spoons
Sand or cornmeal (rice or bird seed may be used if necessary)
Water
Measuring cups and spoons
Plastic aprons or other protectors for children's clothing

Strongly Recommended
Squeeze bottles
Pump (Childcraft Company)
Pails of various sizes
Objects to float and sink
Sponges of various shapes and sizes

Suggested
Eggbeaters
Food coloring
Straws
Paint brushes
Sand may be acquired from local construction companies or from area creek banks or sand bars.

WOODWORKING CENTER

The child receives personal enjoyment and satisfaction from the physical activities encountered in this center. The shaping, assembling, and finishing of wood develops large and small muscle coordination and promotes creativity. The use of real tools in this small group activity is essential as toy tools frustrate children. Close teacher supervision is required.

Essential
25" - 28" high work bench or sturdy wooden table (Childcraft; Black & Decker Workmate Companies)
Safety goggles (to be used by every child in this center) (Childcraft Company)
2 Wood vices or clamps (5")
Claw hammers (at least one 7" and one 13")
Nails (variety of larger sizes)
Saws, 12" to 16" (at least one hack type and one crosscut)
Scrap soft lumber
Glue (Elmer's or other wood glue)
Combination pliers (at least one pair)
Screwdrivers (regular and Phillips head, 3" and 4")
Screws

Strongly Recommended
Hand drill and bits
Ruler
Tape measure
Wide-tip markers
Sandpaper
Nuts and bolts
Storage space for tools, wood, and children's projects

Suggested
Tri-square, 6"
Wrench (several different sizes and one adjustable)
Saw (coping, 10 blades)
Spools (those thread come on)
Scraps such as bottle caps and jar lids
Water base paint and brushes
Brace and bits
Tree stump 25 - 28" high may be used in the classroom for hammering or as a workbench

Most of these materials may be purchased from Childcraft or local hardware and discount stores.

COOKING CENTER

The cooking center provides sensory experiences for children. The medium of food is used for teaching weight, measurement, properties of objects, following directions, nutrition, and social skills.

Essential

Measuring spoons and cups
Hot plate
Wooden spoons and spatulas
Can opener
Food stuff as needed
Variety of mixing bowls
Saucepans of a variety of sizes
Pot holders and aprons
Experience charts for recipes
Tiled floor area

Strongly Recommended
Minute timer
Chart holder
Small paring knife for teacher use
Rolling pins
Vegetable peeler
Paper towels and cups

Suggested
Egg beater
Dishpans
Toaster oven
Electric skillet
Crock pot
Cookie cutter
Dishwashing liquid
Popcorn popper
Cookie sheet

COMMERCIAL MATERIALS

While many commercial kits are available for instructing children in all the basic curriculum areas, the development and implementation of a kindergarten program which meets the needs of the children participating is not dependent upon utilization of commercial materials. Following is a brief synopsis of materials available at the office of the Early Childhood Coordinator. **School district staff are encouraged to preview the material at the State Department of Education before purchasing.**

LANGUAGE ARTS

***Peabody Language Development Kits-Revised (Level P and Level 1)**
AGS (American Guidance Service, Inc.)
Publishers Building, Circle Pines, Minn. 55014

The kits contain an array of visual, manipulative and auditory materials concentrating largely in the visual mode. The materials, particularly the picture cards are very good. The program relies heavily on teacher-class discussion and interaction.

***Look, Listen and Learn** and **Sounds, Symbols and Sense**
Harcourt Brace Jovanovich
Bookmark Reading Program, Eagle Edition
School Department, 1372 Peachtree St. - N.E.
Atlanta, GA 30367

Each teacher's manual calls for setting up a Pre-reading Center stocked with inviting teacher-made games and materials. The activity kit contains photo cards, art cards, floor games, letters, numerals, and storyboards. The program advocates extensive use of classroom discussion.

***Language for Daily Use**
Harcourt Brace Jovanovich
Bookmark Reading Program, Eagle Edition
School Department, 1372 Peachtree St. - N.E.
Atlanta, GA 30367

This is a workbook program for language arts which is varied in its approach. Additional activities promote a means for incorporation into class discussion, sensory experiences, poetry and riddles and visual and auditory discrimination games.

***Ready Steps**
Houghton Mifflin Co.
7055 Amwler Ind. Drive
Atlanta, GA 30360

This program utilizes a wide range of activities with a developmental approach to be used in implementation. The kit is filled with games, cards, wordless books, records, posters, duplicating masters, and activity sheet pads. A teacher's manual accompanies the kit.

***Animal Crackers**
Ginn and Company
6900 E. 39th Street
Indianapolis, IN 46226

The total program is based on an active, manipulative, concrete approach to learning. This program is a kit and text which may be used separately or in conjunction with each other. The kit provides a manipulative approach to teaching skills.

***American Reader - K**
D. C. Heath and Company
Lexington, Mass.

Most of the activities are teacher directed with children responding to the teacher: identifying, describing, naming, and following directions.

***Beginning Readiness** and **Beginning to Read, Write and Listen**
J. B. Lippincott Co.
Harper and Row Publishers, Inc.
Troy, MO 63379

This approach is diverse. Children are given workbooks for use in developing fine motor skills — cutting, pasting, tracing, folding, coloring, and following directions. The program incorporates filmstrips, games, poetry, songs, literature, art activities, and vinyl manipulatives for classroom use. The program approach involves the total child. The material has an At-Home section to involve the parents in the instruction of the child. The workbooks and materials are colorful, workable, and durable.

***PRS Pre-Reading Skills Program from Britannica**
Encyclopedia Britannica Educational Corporation
425 N. Michigan Avenue
Chicago, IL 60611

PRS is divided into two skill areas: auditory and visual. Each component contains lesson plans, teacher guides, manipulative games, and ditto material. The company also publishes a resource book for teachers.

***Alpha Time**
Arista Corporation
2440 Estand Way
P. O. Box 6146
Concord, CA 94524

Basic language arts skills are developed by listening and doing. The program establishes specific behavioral objectives and directs the teacher's efforts towards these goals. Emphasis is placed on active participation in creating, discovering, exploring, and dramatizing in a child-centered environment. The kit includes inflatable huggables which are the medium for introduction of letter recognition and sounds. The children use consumable booklets and worksheets as a method of instruction to reinforce picture cards, books, filmstrips, puzzles and games that are a part of the program. A teacher's guide and evaluation booklet is included.

***Starting Out**
Make Your Own Mark
Off We Go
Macmillan Publishing Co., Inc.
866 Third Avenue
New York, New York 10022

The series of books are intended to provide readiness opportunities in the area of language arts for kindergarten children. The books are consumable and move in a sequence to allow children to advance systematically. The teacher's manuals identify objectives to be taught, note priority skills, provide review exercises for skills previously taught, lists resources to use with the lesson, and provide help in actually presenting the lesson. Reteaching exercises and enriching activities are also given in the manual. The package includes activity booklets for independent completion by the student with the intent to be taken home to parents. Picture books, ABC cards, practice masters, and manipulative games are included. The Read and Tell books promote the development of language-experience stories.

***Kindergarten Keys**
The Economy Company
Oklahoma City, Oklahoma

The program is designed to help children learn in an integrated manner. Experience activities are structured to contribute to the child's growth in the areas of conceptual, language, social/emotional, and preceptual/motor development. Concrete activities are derived from science/social studies, music, language arts, mathematical, art, and physical development. The program is designed around the unit approach with topics pertaining to the child and his/her environment. The teacher's manual lists objectives for each unit as well as each lesson. Teaching techniques are outlined with an evaluation for each lesson as well as extended activities. The lesson activities are divided by subject areas so the teacher can address and reinforce the objectives in an overall manner. The kit provides consumable workbooks for mathematical skills, language arts, and reading. Records, language development cards, solid geometric shapes, pocket chart, wall cards, and templates are also included.

***Crossties**
The Economy Company
Oklahoma City, Oklahoma

Crossties combines instruction in standard curriculum areas with the continuing developmental growth of the pupil. The approach emphasizing language experiences provides for use of discovery centers; provides specific objectives, evaluations, and prescriptions; and encourages parental involvement. The 10 Grand Central Books serve as the focal point of lesson development. The kit includes Discovery Cards which contain activities suitable for discovery centers. The directions are written and drawn to allow nonreading pupils to complete the activities with a minimum of teacher help. Duplicating masters and a 54 book in-classroom library and tapes are included. Materials from **Kindergarten Keys** may also be used with this program.

***Are You Ready?**
Steck-Vaughn Company
Austin, Texas

Objectives in the program are listed as purposes. The main means of evaluation of student performance is through teacher illicited responses in classroom discussions of pupil performance on worksheets. Skills presented are sequenced and build upon what has been introduced earlier. The activities presented utilize concrete objects. Prepage and Additional Activities require first-hand experiential learning as well as group discussions involving the teacher.

***Foundations for Formal Learning**
Zaner-Bloser, Inc.
2500 W. Fifth Avenue
P. O. Box 16764
Columbus, Ohio 43216

Pre-academic skills in reading, writing, and arithmetic as well as incidental learning in social and language skills are taught through seven high-interest thematic units based on experiences familiar to the child. Each directed lesson begins with manipulative experiences designed to teach the desired skill. This is followed-up by the use of a specific page in the consumable workbook to reinforce the skill taught. Many activities allow for teacher creativity and are keyed to the visual, auditory, and kinestetic modalities of the learner. The company also publishes a Resource Book for teachers that contains many activities to complement the seven themes.

***Building Learning Skills**
McDougal Littell and Company
Evanston, IL

This program is designed to provide learning experiences for children in the areas of language arts, social studies, mathematics, science, physical development, and creative arts. The teacher's manual lists purpose of the lesson, objectives, materials needed, enrichment activities, evaluation procedures, and introductory and developmental activities as well as how to present the designated workbook page. Picture cards and duplicating masters also accompany the workbook.

***P.R.E.P. - Pre-Reading Evaluation Program**
Readiness
Laidlaw Brothers Publishers
River Forest, IL

The series is a workbook based readiness program with emphasis placed on language arts. A performance objective is given for each lesson as well as a list of needed materials, motivational activities, teaching procedures, and evaluation techniques. Group and individual observation sheets for skill identification are also provided.

***The Laidlaw Language Program**
Laidlaw Brothers Publishers
River Forest, IL

This series emphasizes the acquisition of basic grammar and writing skills through a workbook approach. A performance objective is given as well as a suggested procedure and additional activities for the teacher to direct which pertain to the designated lesson.

***Discovering Phonics We Use**
Riverside Publishing Company
4640 Harry Hines Boulevard
Dallas, TX 75235-9990

This series is a workbook approach to teaching phonics. Specific objectives are given for each lesson as well as motivational, instructional, and supplementary activities. The content is concerned with the letters of the alphabet, the sound the letter makes in the initial position, and how the letter is formed on the page.

***Kindergarten-Readiness**
Rise and Shine
Away We Go
Scott, Foresman and Company
Tucker, GA

The series contains two workbooks. **Rise and Shine** is the readiness book which, as a part of the lesson format, includes early learning lessons. These consist of exercises which teach basic concepts such as directional words, auditory and visual discrimination, and oral communication skills. Objectives are given for each lesson as well as a materials list, motivational activities, and instructional techniques. The lessons given in **Rise and Shine** are outlined in the same manner as those in the early learning lesson. Workbook pages and spirit masters are utilized in the instruction of each lesson. Some lessons are accompanied by a read aloud story pertaining to the theme of the workbook page. Enrichment and further practice activities are also listed. **Away We Go** is a workbook recommended to be used following **Rise and Shine.** The format of the book is the same and concepts covered are a continuation of those found in **Away We Go.** Both books have periodic student evaluation provisions.

***An Instructional Manipulative Series**
Continental Press, Inc.
Elizabethtown, PA 17022

This kit provides the teacher with thirty folders and accompanying manipulative cards. A teacher's guide and evaluation chart are also included. Topics which are addressed include: visual discrimination skills, classification skills, sequences and patterns, auditory discrimination, spatial perception, and the alphabet. This can be used in the learning center format.

***Santa Clara Inventory of Developmental Tasks (I.D.T.)**
Richard L. Zweig
Associates, Inc.
20800 Beach Boulevard
Huntington Beach, CA 92648

This program can serve as a screening device, a basis for parent conferences and as a record of a child's performance on the tasks measured and taught. The sixty tasks are classified in eight categories: Motor Coordination, Visual Motor Performance, Visual Perception, Visual Memory, Auditory Perception, Auditory Memory, Language Development, and Conceptual Development. Both the scoring system and instructional activities are clearly explained and easily followed. (See Appendix H.)

MATH

***Key Math Early Steps Program**
American Guidance Service
Publishers Building
Circle Pines, Minn. 55014

Early Steps intergrates activity-based, manipulative instruction with the orderly progression of lessons provided by a workbook/sheet format. The program is based on a developmental sequence for instruction. The manipulatives provided include: blocks, card decks, math chips, tumblers, numeral cards, math boards and trays, meter ropes, and activity cards.

***Harper and Row Mathematics**
Harper and Row Publishers, Inc.
Troy, MO 63379

A workbook approach which offers games, songs, and riddles to reinforce the topic of the day. Also available for classroom use from **Harper and Row** are a Big Book edition of the workbook, reinforcement, practice, and enrichment masters.

***Succeeding in Mathematics**
Steck-Vaughn Co.
Austin, TX

The program emphasizes that the foundation of each mathematical idea must be the child's active manipulation of concrete objects. The program utilizes two or three activities on the concrete experiential level prior to introducing each worktext page.

***Macmillan Mathematics**
Macmillan Publishing Company
866 Third Avenue
New York, New York 10022

This workbook approach to teaching math concepts includes punch out pictures which the child is to manipulate in completed assigned pages. The teacher's manual includes a lesson objective, motivational manipulative activity ideas, teaching instructions, diagnosis techniques, and remedial activities as well as activities for students needing further practice or enrichment. Unit evaluation and posters illustrating various concepts are included as a part of the program. Specific concepts covered include: numbers, fractional parts, money concepts, geometry, and problem solving.

***Building Mathematical Skills**
The Riverside Publishing Company
Lombard, IL

This is a workbook approach to teaching the following mathematical concepts: comparison of objects; sequence of events; matching sets; identification of numbers, shapes, patterns, coins; and understanding of mathematical vocabulary important to conceptual understanding. Each lesson provides suggestions for incorporation of unit teaching into the learning center format. Behavioral objectives, motivational activities, and instructional techniques for large and small groups are included in the teacher's manual.

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***Scott, Foresman Mathematics**
Scott, Foresman and Company
Tucker, GA

The workbook approach to teaching mathematical concepts is accompanied by duplicating masters for extra practice, evaluation, and enrichment. Concepts to be taught which are listed in the material include: one-to-one correspondence, number recognition and comparing, addition and subtraction of whole numbers, fractional parts, time, geometric shapes, and logical reasoning. The lesson organization consists of format, the lesson objective, materials needed, motivational activities, instructional techniques, additional activities, and resources found in the teacher's manual. Twenty-three stories are given in the teacher's manual which assist in the presentation of various concepts.

***Heath Mathematics**
D. C. Heath and Company
Lexington, MA

Cartoons and photographs are used in illustrating each workbook page of the units presented in the series. The lessons are sequenced and make reference to concrete models presented through illustrations. Basic and enrichment worksheets as well as copymasters accompany every lesson. The series contains readiness worksheets which involve manipulation of pictures and construction of activities. Evaluation sheets for each unit are also included. Some of the concepts listed to be taught are: counting and writing numbers through 20, addition and subtraction readiness, reading a picture and bar graph, geometric shapes, pattern recognition, classification, and size relationships.

***The Number Workers: Mathematics K (Alpha-Time Math)**
Arista Corporation
Concerod, CA 94524

This approach relies on individual student workbooks, games, number recognition cards, records, and master sheets. The numbers are introduced through people or "workers." Workbook pages are to be completed in conjunction with games and manipulative activities. Concepts to be taught in the series include number recognition, positional words, introduction to addition and subtraction concepts, use of the number line, introduction to the concepts of money, fractional parts, and time.

***Houghton Mifflin Mathematics**
Houghton Mifflin
One Beacon Street
Boston, MA 02108

The series is comprehensive in the instructional approach presented. A K-2 activity kit is available which contains a variety of manipulatives and games that complement and assist in the lessons presented in a workbook format. Topics covered in the series include: one-to-one correspondence, ordering numbers, writing and understanding number concepts 0-20, addition and subtraction readiness, position words, and reading graphs. The manipulatives provided in the kit lend themselves to the learning center instructional approach. The lesson format for teachers consist of a stated objective, instructional techniques, evaluation, and reteaching activities. A teacher's resource book and practice activities workbook also accompany the series.

***Mathematics Their Way**
Mary Varatta Lorton
Addison-Wesley Publishing Company
120 Interstate North Parkway, East
Suite 168
Atlanta, GA 39339

This program is an activity-centered mathematics program for early childhood education. The goal of the activities is to develop understanding and insight of the patterns of mathematics through the use of concrete materials. The activities are designed to help young children see relationships and interconnections in mathematics and to enable them to deal flexibly with mathematical ideas and concepts.

SOCIAL STUDIES

***Myself and Others**
Steck-Vaughn Co.
Austin, TX

The program is designed to be flexible. Each lesson includes suggestions for Extended Learning Activities and suggested learning center activities are found in each lesson.

***My Friends and Me**

AGS American Guidance Services, Inc.
Publishers Building
Circle Pines, Minn. 55014

The program's approach advocates learning through experience. Activities stem from illustrated stories, puppets, recorded activities, magnetic shapes, activity pictures, and print blocks. Family activity sheets are included to be sent home weekly.

***People Around Us**
Scott, Foresman and Company
Tucker, GA

The workbook approach teaches social studies through a unit method. Concepts such as citizenship, reading a bar graph, understanding interdependence among people, and self concept development are explored. The lessons are organized around objectives with motivational activities listed. Instructional techniques are suggested as well as additional activities.

***Me**
Windows On Our World
Houghton Mifflin Company
Boston, MA

The workbook series also includes a poster pad of activity sheets and study prints for small group instruction as well as filmstrips to extend skills development. Units covered in the series include: Me, My Friend, My School, My Community, and My Tools. Broad topics approached through unit topics are history, geography, citizenship, and economics. The teacher's manual provides lesson planning by listing the main idea, lesson objective, materials needed, motivational techniques, lesson instruction, and evaluation.

***My World**
Ginn and Company
Lexington, MA

The series explores five areas: Me, Myself, and I; Friends and Neighbors; Rules for Everyone; Things We Need; and Good Times Here and There. The large photographs accompanying the units are intended to stimulate the conversation relating to the objectives and vocabulary given. Skill Masters are also included for reinforcement.

SCIENCE AND HEALTH

***Scott, Foresman Science**
Scott, Foresman and Company
Tucker, Georgia

This series uses a series of worksheets with stories and activities described in a teacher's manual. The stories introduce science vocabulary and concepts. Activities are listed which require some teacher direction. They may be adapted to a learning center format easily. Each unit contains a letter to the parents explaining the concepts to be taught in the lesson which follows. Tapes and posters are also included to add substance to the lesson.

***Choosing Good Health**
Scott, Foresman and Company
Tucker, GA

The workbook series requires students to construct items, puzzles, and pictures as a part of the instructional method defined. Each lesson presents a concept relating to good health practices. Objectives and methods of instruction are listed for each lesson. Clear, colorful photographs are used to illustrate each lesson.

***GOAL: Beginning Science**
Milton Bradley Company
Mississippi School Supply
Jackson, MS

The program is designed for small group instruction. Through unit cards the teacher is directed to conduct activities which encourage student participation. Some units are prerequisites to others. Objectives for each unit are listed as are exploratory activities and lesson activities. Spirit duplicators and activities for evaluation are included in each unit. Activities for evaluation are included in each unit.

***Mississippi Child Care Food Program**
Mississippi State Department of Education
Child Care Food Program
P. O. Box 771
Jackson, MS 39205

Materials are available for the teacher to structure lessons around basic concepts relating to nutrition. (This material is free upon request.)

***Addison-Wesley Science**
Addison-Wesley Publishing Company
Reading, MA

This science series engages the child in the exploration of topics through many avenues. The lessons are presented to develop visual discrimination, vocabulary development, logical thinking, flexibility of thought, and listening and speaking skills. The teacher's manual provides the teacher with information relating to the concept to be taught, summarizes the science content presented, lists vocabulary to be explained, and lists materials to be utilized and instructional techniques employed. A materials kit and duplicating masters are included. The activities can be used in a learning center format.

***American Cancer Society**
345 N. Mart Plaza
Jackson, MS 39206

The American Cancer Society has available brochures and kits at no cost to teach body awareness and good health habits.

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PARENTING

***Systematic Training for Effective Parenting**
American Guidance Service, Inc.
Circle Pines, MN 55014

The material in this kit is designed to assist in facilitating parental discussion on topics such as Children's Behavior and Misbehavior; Communication: Listening, Exploring Alternatives; Developing Responsibility; and Encouragement. The five cassette tapes are to be used during nine sessions with a guide book to direct the leader. A parent handbook, posters, and charts are also included to enhance the sessions.

Although good equipment, adequate materials of instruction, and suitable facilities are very necessary and desirable, the most important factor is the professional, skillful teacher. Equipment can be made (see Appendix G) and/or adapted by teachers to suit a variety of needs within the instructional program.

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BIBLIOGRAPHY OF TEACHER'S RESOURCE BOOKS

TEACHER'S RESOURCE BOOK BIBLIOGRAPHY

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Program Assessment

PROGRAM ASSESSMENT

Assessment is a judgemental skill. An experienced teacher should call into consideration all the techniques that are useful and reasonable. Evaluation of the program objectives or an individual's growth should not be limited because of the narrowness of only one instrument. The total package of information learned about both the program and the individual must be brought into play if the potential of all the children is to be reached. In addition, an assessment program needs to provide continuity from the beginning of the school year to the end of the school year and with ensuing school years.

Assessment means charting the growth of each child in all phases of development, encouraging natural curiosity, and opening new vistas for the future.

WHAT CONSTITUTES ASSESSMENT?

Kindergartens are established on the premise that early experiences help insure academic success. Success for the children is dependent upon how effectively schools are able to assess their programs in relationship to the needs of the children.

Due to differences in five year olds, assessment must be a primary concern of the kindergarten teacher. Naturally, this means that assessment plans must be included when a school designs its kindergarten program.

Decisions concerning assessment must be made in the development of the program. These decisions will involve:

What type instruments should be used?
Should informal assessment be given more weight than formal?
Which instruments will serve the program's overall goals and philosophy?
Where can these be obtained?
When and how often should they be used?
And most importantly, how is this information to be used?

The first step is to conduct an assessment of all the children on an individual basis. All teachers should have had training with the instruments to be used.

If possible, evaluation of the children should be conducted in the spring preceeding the fall enrollment. If this is not possible the initial assessment should be conducted at the beginning of the school year after the teacher has spent two or three weeks in the program to allow the children an opportunity to adjust to the new environment.

SCREENING INSTRUMENTS

Screening instruments should provide information about each child and allow teachers to develop plans for small and large group instruction and the total program.

This initial screening should be conducted using instruments such as the **DIAL-R (Developmental Indicators for the Assessment of Learning-Revised)**, which can be used in a relatively short period of time while the children are in centers, or the **Santa Clara Inventory of Developmental Tasks**, which takes more time to administer.

The **DIAL-R** is a screening instrument designed to be administered in a relatively short period of time to a large number of children. Interpretation of the completed **DIAL-R** requires little professional time. Since **DIAL-R** is a screening test it cannot be regarded as the total assessment of the child. The purpose for using this instrument may not be for intervention, placement or treatment. It identifies those children in need of follow-up services.

The Santa Clara Inventory of Developmental Tasks (**I.D.T.**) identifies 60 tasks which represent "milestones" in development. The tasks are sequenced by chronological age and by degree of difficulty beginning with motor skills, continuing with perceptual, and concluding with language and cognitive skills. The **I.D.T.** is an excellent screening device, a record to be used in parent conferences, and another device for designing activities for individual needs.

Both of the above instruments should lead to additional assessment or diagnostic evaluation based on individual, program, and general research needs of individual school districts. Additional information concerning these instruments is found in Appendix H.

After conducting initial assessments the information gained should be regarded as a beginning in program planning and implementation. Initial assessments provide data about children as they enter a program. The data are then used to plan more specifically about each child's needs in relation to specific goals. Other evaluative instruments are necessary to assist teachers in keeping track of information about each child on a short and long range basis. After the initial screening a decision concerning standardized tests, checklists, and anecdotal records should be made.

STANDARDIZED TESTS

Standardized tests are not to replace other types of instruments, but are used to provide comparisons with the beginning and the end of a program, with year by year growth throughout the system, or for the study of the program's curriculum.

In the event that the State Department of Education suggests one particular standardized instrument for a state-wide program evaluation, school districts will have the opportunity to use additional instruments for closer scrutiny of the program.

Four standardized tests are suggested for consideration. Each is explained more fully in Appendix I.

I. **The Stanford Early School Achievement Test (SESAT)**, tests four areas — environment, mathematics, letter sounds, and aural comprehension.
The **SESAT** provides information from which to develop the child's instructinal experiences.

II. **The Metropolitan Readiness Tests (MRT)**, tests those skills "that are important for early school learning — reading, mathematics, and language development." The test helps determine readiness for learning and identifies instructional needs. **(Psychological Corporation)**

III. **The Boehm Test of Basic Concepts (BTBC)**, is a picture test appraising concepts normally found in preschool and primary grades. It assists in the identification of children whose understanding of basic concepts is low, but also identifies concepts not understood.

IV. **The Test of Basic Experiences (TOBE)**, provides objective measures of the degree to which young children have acquired the concepts and experiences that are related to effective classroom participation during the early school years.

CONTINUOUS ASSESSMENT

Continuous assessment is used to provide links between the identification of student's instructional needs and the program's instructional objectives. A suggested example of an instrument for use is the **Georgia Kindergarten**

Assessment of Communication Arts and Numbers Understanding, (National Evaluation Systems, Inc., Amherst, Mass. 01002) which provides the user with diagnostic information on the developmental level of skill attainment for each objective for individual students. Excerpts are found in Appendix J.

The test is organized into six (6) sections, each of which may be administered independently over a period of time or as a part of the complete test. The Communication Arts are assessed through items written for the twenty-three (23) objectives of the four (4) goal areas of number and numeration, measurement, geometry, and money.

The test manual provides detailed procedures and directions that should be followed to maintain consistency of administration. Included also is a review of the materials needed for student testing, tips on providing motivation of students, and tips on scoring using the three (3) student record sheets and class profile. There are two (2) types of items — those administered on a one-to-one basis and those administered in small groups of three to five students.

For all of the eighty-five (85) items the following information is provided: Objective tested, item number, mode of assessment, directions, checklist of tasks/skills assessed, and the scoring criteria. For those items requiring a worksheet, a set of forty-three (43) oaktag worksheets marked with the appropriate test item number is included in the manual.

INFORMAL RECORD KEEPING

Concern for excellence in education and in Mississippi Kindergartens has sent educators scurrying to attest to the fact that schools can and should be accountable — often using only the type of standardized instruments suggested formerly. Standardized testing can be narrow, time consuming, and expensive. Therefore, it stands to reason that if there are other methods of evaluation that are less time consuming, less expense, and these methods include a broader set of evaluative criteria, they should be considered. These methods do exist and are commonly known as classroom teacher predictions based on checklists, anecdotal records, and information from the home. **(Tallager, Perrone, Perry, and Stevenson)**

CHECKLISTS

Checklists provide an efficient means of recording the presence or absence of specific behaviors in given situations. The checklist consists of a list of statements about behaviors which may be exhibited. For each statement on the list, there is a place to indicate whether or not the behavior was observed. Hence, checklists indicate a precise yes/no on the part of the observer. Basically, checklists give a means of recording whether a behavior is present or not, also, whether the behavior was observed or not at the time the checklist was used. On this type of form, usually a check mark, or other indicator is to be placed in the appropriate space on the checklist form. Two examples of a checklist appear in Appendix K. Caution: Teachers **should not** teach an item which says "write name." Instead a teacher checks a piece of art work to see if the child is able to write his name and **then** marks the checklist.

ANECDOTAL RECORDS

Anecdotal records are brief accounts of incidents and behaviors. They should be factual descriptions and should be used for recording information about unanticipated behaviors. The exact format of the record form may vary, but certain items should be included: name of the child, name of the observer, date, time, setting, and a description of the incident. See Appendix L for an example.

PROGRAM EVALUATION

The preceding sections of this chapter have primarily dealt with student evaluation. However, assessment of a successful kindergarten program must be based not only on student's needs and interests but also on how those needs are met in the whole program. Teachers must actively plan, implement, and evaluate the operation of the entire program. At established times the teacher should review the learning environment needed and provide for its relevency. A review should be made of the progress students are making with regard to curriculum in order to gain information about what knowledge, skills, and attitudes should be expanded, included, or deleted in the learning environment. Assessment of the materials and equipment needed to implement the curriculum should be made periodically. The organization and management should be critiqued as to its effectiveness in dealing with students, with those providing the instructional services, and with parents or volunteers.

Assessment of the interworking of these components is necessary. Each program director or teacher should decide how each component will be evaluated, how to gather the data to assess the components, how to analyze the data gained, and what use will be made of the analysis of the data. Decisions must be made not only on state and local program requirements but also the exhibited needs of students.

The two illustrations in Appendices E and J are examples of ways to obtain program data for decision-making. One example is a sample of an Accountability and Instructional Management (AIM) Plan for kindergarten (E), and the second is a portion of an evaluation checklist for evaluating all phases of the kindergarten program (J). They are by no means exhaustive in depth and therefore represent only a point of departure for the process of locally evaluating the district's kindergarten program.

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PROGRAM ASSESSMENT

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REVIEW OF SCREENING INSTRUMENTS

Developmental Indicators for the Assessment of Learning — Revised (Dial-R)
Carol D. Mardell and Dorothy Goldenberg

Childcraft Education Corp.
20 Kilmer Road
Edison, NJ 08817

Kit — Approximately 60 minutes while 6-8 children rotate through 3 centers

General concepts — The **DIAL-R** is designed to be used for identifying children with potential learning problems. This prekindergarten screening test assesses development in the areas of motor, concepts, language and social — emotional development. Scores are established so that the use of **DIAL-R** will result in 10 to 15 percent of children screened being referred for further diagnosis. Percentages may be higher for Mississippi's kindergarten population.

The training of examiners opens the door to community involvement. Examiners may be local club members who include administering the **DIAL-R** assessment as one of their projects. Other groups to consider might be retired senior citizens, retired teachers, church organizations, or interested parents and individuals.

Age range - 2-0 to 6-11 years

DIAL-R. SCORESHEET

Child's Name ______ LAST ______ FIRST ______ SAMPLE
Address ______ NUMBER ______ STREET ______ CITY/STATE/ZIP
Phone Number (____) ______ AREA CODE
Parents' Names ______ MOTHER ______ FATHER
1 2 3

1	2	3
Potential Problem	OK	Potential Gifted

School ______
Class ______
Hearing + -
Vision + -

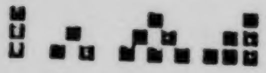
Today's Date ______ ______ ______
Birth Date ______ ______ ______
C.A. ______ ______
Boy ______ Girl ______

MOTOR (red)

	SCALED SCORE 0	1	2	3	4
1. Catching	0	–	1	2	3
2. Jumping, Hopping, and Skipping	0	1-2	3-8	9-12	13-16
3. Building	0	1	2	3	4
4. Touching Fingers	0	1	2	3	4
5. Cutting	0-1	2	3	4	
6. Matching	0	1-7	8-9	10-11	12
7. Copying	0	1-7	8-11	12-18	19-24
8. Writing Name	0			1	2

2. jumps 0 1
+ hops (right) 0 1 2 3 4 5 6
(left) 0 1 2 3 4 5 6
+ skip
0 any 1 slide 2 step/hop 3 skip

3. Building



6. Matching
| ○ + □ △ ◇
E N D S

7. Copying

|	0 1 2	E	0 1 2
○	0 1 2	N	0 1 2
+	0 1 2	D	0 1 2
□	0 1 2	S	0 1 2
△	0 1 2		0 1 2
◇	0 1 2		0 1 2

TOTAL
(Max - 31)

OBSERVATIONS

CONCEPTS (green)

	SCALED SCORE 0	1	2	3	4
1. Naming Colors	0	1-7	8-15	16-18	
2. Identifying Body Parts	0	1-9	10-12	13-15	16-18
3. Counting (Rote)	0-2	3-4	5-8	9-10	11
4. Counting (Meaningful)	0	1	3	5-7	9
5. Positioning	0	1-2	3	4	5
6. Identifying Concepts	0	1-14	15-20	21-26	27-28
7. Naming Letters	0			1-10	11-16
8. Sorting Chips	0			1-4	5-6

1. R O W G Bl Y P BR P

2. nose neck chin ankle
hair stomach shoulder hip
ear knee chest waist
teeth thumb heel
tongue elbow wrist

4. 1 3 5 7 9

5. on under corner between middle

6. biggest big
hot
empty
night
longest long
most more
fastest fast
littlest little
cold
full
day
shortest short
least less
slowest slow

7. O B P I R W Y G

8. by color R B Y
by size big little
by shape △

TOTAL
(Max - 31)

OBSERVATIONS

LANGUAGE (purple)

	SCALED SCORE 0	1	2	3	4
1. Articulating	0	1-14	15-26	27-29	
2. Giving Personal Data	0	1-3	4	5	6-7
3. Remembering	0	1-3	4-5	6-7	8-9
4. Naming Nouns	0	1-15	16	17	18
5. Naming Verbs	0	1-9	10-14	15-16	17-18
6. Classifying Foods	0	1-2	3-4	5-6	7-8
7. Problem Solving	0	1	2-3	4-5	6-8
8. Sentence Length	0	1-2	3	4	5-8

1. pan rabbit truck
bed chair dress
cup knife sandwich
towel key thumb
hand fish mouth teeth

2. first name sex phone #
last name street
age city state

3. clapping 1 2 3
numbers 1 2 3
sentences 1 2 3

4. cat phone comb
plane TV pencil
car clock ambulance

5. sleep cut climb
fly watch write
drive bike go to hospital

6. Tally ______

7. hungry 0 1 2
dark room 0 1 2
hurt 0 1 2
broken 0 1 2

TOTAL
(Max - 31)

OBSERVATIONS
1 2 3 4 5 6 7 8

Cut-off Points

Motor score ______
Concepts score ______
Language score ______
TOTAL ______

FILMED FROM
BEST COPY AVAILABLE

Santa Clara Inventory of Developmental Tasks (I.D.T.)

William L. Gainer (Ed.)

Richard L. Zweig Associates, Publishers, Inc.
20800 Beach Boulevard
Huntington Beach, CA 92643

Two parts - Guide and Activities; special sessions or as part of curriculum.

General concepts — The performance skills of the I.D.T. are considered to be prerequisite to success in more advanced cognitive tasks. Children who exhibit difficulty in learning the basic skills of reading, mathematics, oral, and written communication generally exhibit deficiencies in some of these developmental skills. The I.D.T. can, therefore, be used as a "Failure Prevention-Program" in the assessment of young children and as a developmental guide for ongoing instruction.

Age Range — Pre-school - 7 years

The instrument should be administered at the beginning of school and at the end of the school year. Because of the length of the instrument, many teachers hesitate to use it. By including the items for the instrument in the daily schedule of activities, this objection can be overcome. A sample schedule has been developed to illustrate that the instrument can be used as an evaluation tool for all the children in one classroom during the first twelve (12) weeks of school:

Week of Evaluation	**Activity**	**When to Evaluate**
Orientation	Walk 1-2	Going to Centers
Orientation	Run 1-3	Recess
Orientation	Jump 1-4	2nd Group Time
1	Follow a Target With Eyes 2-2	1st Group time Monday
1	Tie Shoes 2-8	All week
1	Balance On One Foot 1-6	2nd Group Time Tuesday
1	Crawl 1-1	2nd Group Time Wednesday
2	Hop 1-5	All Week
2	Use of Hands and Arms 1-7	All Week
3	Name Objects From Memory 4-5	All week
3	Copy a Circle 2-4	2nd Group time Thursday

6

Week of Evaluation	Activity	When to Evaluate
3	Copy a Cross 2-5	2nd Group Time Thursday
3	Copy a Square 2-6	2nd Group Time Thursday
3	Copy a Diamond 2-1	2nd Group time Thursday
3	Skip	1st Group Time Tuesday
4	Jump Rope Assisted 1-10	Recess All Week
4	Jump Rope Unassisted 1-11	Recess All Week
4	Match Color Objects	Art Center All Week
4	Balance Beam 1-9	Block Center All Week
4	Copy Letters 2-9	Printing Center All Week
5	Match Size and Form On Paper 3-6	Manipulative Center Monday
5	Recall a 3 Color Sequence 4-6	Art Center All Week
5	Match Sized Objects 3-5	Manipulative Center Tuesday
5	String Beads 2-3	Manipulative Center Wednesday
6	Repeat a Sentence 6-7	Group Time All Week
6	Discriminate Between Common Sounds 5-5	Listening Center Monday-Wednesday
6	Perform 3 Commands 6-6	All Day Tuesday-Thursday
6	Copy a Sentence 2-10	Printing Center Friday
7	Locate the Source of a Sound 5-7	2nd Group Time Monday
7	Match Numerals 3-7	Manipulative Center All Week
7	Match Letters 3-8	Manipulative Center All Week
7	Give Personal Information 7-7	All Week
7	Match Form Objects 3-4	Manipulative Center Wednesday
7	Identify Common Sounds	Listening Center Thursday-Friday
8	Recall Animal Pictures 4-4	Manipulative Center All Week

Week of Evaluation	Activity	When to Evaluate
8	Match Directions on Design 3-9	Manipulative Center All Week
8	Match Beginning Sounds 5-8	Listening Center Wednesday
8	Isolate Visual Shapes 3-10	2nd Group Time Thursday
9	Describe simple objects 7-8	Manipulative Center All Week
9	Recall 2 Items in Sequence 4-7 and Reproduce a Design From Memory 4-8	Manipulative Center All Week
9	Repeat a Tapping Sequence 6-8	Music Center All Week
9	Match Word Forms 3-11	Printing Center Wednesday
10	Repeat 4 Number Names 6-9	Manipulative Center All Week
10	Assign Number Value 8-8 and Identify Top, Middle, Bottom, First, Last 8-9	Manipulative Center All Week
10	Relate Words and Pictures 7-9	Listening Center Tuesday-Thursday
11	Cut with Scissors	Art Center Monday
11	Match rhyming sounds 5-10	Listening Center Tuesday-Thursday
11	Repeat 5 number names	Manipulative Center All Week
12	Heat differences between similar words 5-9	Listening Center Monday-Wednesday

The following items can be administered during a center time during the twelve weeks:

4-9	Recall 3 items in sequence
4-10	Recall 3 part design
4-11	Recall word forms
5-11	Match ending sounds
6-10	Recall story facts
7-10	Define words
7-11	Language usage
8-10	Tell how 2 items are alike
8-11	Sort objects 2 ways

The following is an example of the use of the I.D.T. while the children are engaged in their activities. In this way the teacher does not have to set up special "testing times." This example is recorded on a "revised" profile.

ACTIVITY	DATE	SCORE	FOLLOW-UP	MASTERY
Walk 1-2	9/82	2		9/82

EXAMPLE 1 (Walk 1-2). This observation was made during the week of orientation. The children were instructed to move from center to center along a masking tape path. Mastery is determined if the child walks the path and doesn't step on the tape more than once.

From the original "**Developmental Profile,**" Santa Clara Inventory of Developmental Tasks. (William L. Gainer, Ed.), 1974.

REVIEW OF STANDARDIZED TESTING INSTRUMENTS

Stanford Early School Achievement Test (SESAT)

Richard Madden, Eric F. Gardner and Cathy S. Collings

The Psychological Corporation
1372 Peachtree Street, NE
Atlanta, GA 30367

Test booklets/Approximately 2 hours over several sittings

General Concepts — the test was developed to "aid in the assessment of the background of pupils upon entrance to school" and to provide a "baseline where instructional experiences may begin." (Madden & Gardner, 1969, p. 12). The SESAT is divided into four subtests. They are (1) environment, (2) mathematics, (3) letters and sounds, and (4) aural comprehension. The test yields subtest scores and a total test score. Each subtest contains concept areas:

Environment Subtest — clothing, stores/factories, communications, transportation, geography, holidays, community helpers, health and safety, basic science, food selection/sources, and animals

Mathematics Subtest — one-to-one correspondence, conservation, geometry, simple operations, counting/numeration, measurement, and math language

Letters and Sounds Subtest — recognition of upper and lower case letters, and recognition of beginning consonant sounds

Aural Comprehension Subtest — memory/knowledge, inference/logic, and sequencing

The results of initial testing with SESAT have been successfully used for curricular planning and program individualization. The analysis of the concept area provides the framework to look at individual and group scores in order to aid decision making about emphasis which will be placed on specific concepts. The information can be beneficial when determining which children need individual attention or which children can be grouped for small group instruction. The information can also be used for determining enrichment activities which would allow a student to develop a deeper understanding of a particular concept.

Age Range — Kindergarten/First Grade

Metropolitan Readiness Tests

Joanne R. Nurss and Mary E. McGauvran

The Psychological Corporation
1372 Peachtree Street, NE
Atlanta, GA 30367

Test Booklets/Approximately 90 minutes over several sittings

General Concepts — Provides a skill based assessment of skills necessary for early school learning in reading, mathematics, and language development. Scores for readiness for instruction, identifying instructional needs, and reports for parent-teacher conferences. Level I tests areas of auditory memory, rhyming, letter recognition, visual matching, school language and listening, quantitative language, and an optional test on copying. Level II (used at end of K or beginning first grade) tests visual matching, finding patterns, school language, listening, and three optionals: quantitative concepts, quantitative operations, and copying.

Age Range — Beginning kindergarten (Level I) to end of kindergarten and beginning of first grade (Level II).

The Psychological Corporation, 1983 Catalog, pgs. 112-114

Test of Basic Experience (TOBE)

Margaret H. Moss

CTB/McGraw-Hill
Order Service Center
Del Monte Research Park
2500 Garden Road
Monterey, CA 93940

Test Booklets/Approximately 30-45 minutes to a group with a teacher and aide

General Concepts — Two levels encompassing preschool through first grade which tests language, mathematics, science, and social studies. The examiner reads a verbal stimulus aloud and the child responds on the booklet. An instructional activities kit is available with materials to help teach the concepts tested. Also suggested are activities for parental use at home. Spanish directions available.

Age Range — Preschool through grade 1 - two levels

CTB/McGraw-Hill, 1984 **Catalog of Test Materials and Scoring Services**, 46-47.

Boehm Test of Basic concepts

Ann E. Boehm

The Psychological Corporation
1372 Peachtree Street, NE
Atlanta, GA 30367

Test Booklets/Approximately 15-20 minutes for each booklet

General Concepts — A picture test to measure children's mastery of concepts considered necessary for achievement in the first years of school. The test is read aloud by the teacher. Results may be used both to identify children with deficiencies in this area, and to identify individual concepts on which the children could profit from instruction. Spanish Form available.

Age Range — Appropriate for use with children in kindergarten, grade 1, and grade 2.

Boehm Ann E. **Boehm Test of Basic concepts Manual,** The Psychological Corporation, 1972 Edition, Forms A and B, Pgs. 1-2.

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SAMPLES OF CHECKLISTS

CHILD-GROWTH CHECKLIST

Name of Child ______________________________

School ______________________________ **Date** ______________________

		Satisfactory	Unsatisfactory	Further Assessment Required	Comments
I.	Motor Growth				
1.	Prints name				
2.	Cuts with scissors				
3.	Throws and catches balls				
4.	Walks on balance beam				
5.	Knows left-right				
6.	Skips, hops, jumps				
7.	Knows body parts positions				
8.	Ties shoes				
II.	**Language Growth**				
1.	Follows directions				
2.	Is attentive				
3.	Converses with peers				
4.	Fluent in vocabulary				
5.	Aware of sequential order				
6.	Able to formulate ideas				
7.	Uses complete sentences				
8.	Able to retell stories				
III.	**Social-Emotional Growth**				
2.	Cooperates				
3.	Shows self-control				
4.	Works independently				

		Satisfactory	Unsatisfactory	Further Assessment Required	Comments
5.	Responsible, dependable	____	____	____	____
6.	Participates in group activity	____	____	____	____
IV.	Cognitive Growth	____	____	____	____
1.	Matches pictures	____	____	____	____
2.	Classifies objects	____	____	____	____
3.	Counts	____	____	____	____
4.	Recognizes shapes, sizes, and colors	____	____	____	____
5.	Identifies similarities and differences	____	____	____	____
6.	Retains information	____	____	____	____
7.	Recognizes rhyming words	____	____	____	____
8.	Comprehends logically	____	____	____	____
V.	Physical Growth	____	____	____	____
1.	Good Health	____	____	____	____
2.	Vision	____	____	____	____
3.	Hearing	____	____	____	____

Wallace, Gerald and Stephen C. Larsen. **Educational Assessment of Learning Problems: Testing for Teaching.** Boston: Allyn and Bacon, Inc., 1978, 171.

CHILD GROWTH CLASS PROFILE

Student Names	Student A	Student B	Student C		
I. Motor Growth					
1. Prints name					
2. Cuts with scissors					
3. Throws and catches balls					
4. Walks on balance beam					
5. Knows left-right					
6. Skips, hops, jumps					
7. Knows body parts positions					
8. Ties shoes					
II. Language Growth					
1. Follows directions					
2. Is attentive					
3. Converses with peers					
4. Fluent in vocabulary					
5. Aware of sequential order					
6. Able to formulate ideas					
7. Uses complete sentences					
8. Able to retell stories					

III.	**Social Emotional Growth**						
IV.	**Cognitive Growth**						
1.	Matches Pictures						
2.	Classifies objects						
3.	Counts						
4.	Recognizes shapes, sizes, and colors						
5.	Identifies similarities and differences						
6.	Retains information						
7.	Recognizes rhyming words						
8.	Comprehends logically						
V.	**Physical Growth**						
1.	Good health						
2.	Vision						
3.	Hearing						

Legend: Satisfactory - S Unsatisfactory - U Further Assessment - FA

Wallace, Gerald and Stephen C. Larsen. **Educational Assessment of Learning Problems: Testing for Teaching.** Boston: Allyn and Bacon, Inc., 1978, 171.

ANECDOTAL RECORD

ANECDOTAL RECORD

Name: ______________________________ Date: ______________

Observer: ____________________________ Time: ______________

Setting: ____

Incident:

Is this report cross-filed? __________ Yes __________ No

Is supporting information available? __________ Yes __________ No

What is it? ___________________________ Where is it? ____________

Cartwright, Carol A. and G. Phillp Cartwright. **Developing Observation Skills**, New York: McGraw-Hill Book Company, 1984, 153.

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Parents and the Learning Process

PARENTS IN THE LEARNING PROCESS

Parents or guardians are a child's earliest and most important teachers. If the kindergarten program is to be meaningful, it requires building upon the child's initial learning experiences. It is essential that administrators set the stage or lay the foundation for informing and involving the parent(s) in the kindergarten program. Administrators serve as an advisory council to enhance good parent-teacher relationships. The key is the creation of a positive, two-way information dissemination network between the home and school. **(NAEYC, 1983)**

Administrators should promote avenues that allow teachers and parents time to work together to form a home-school partnership that fosters the growth and development of the total child. Administrators must take the initiative in establishing a communication system with parents or those responsible for children regarding the impact of education on the progress of the community. Parents that are directly involved in the education of their child often find that the child tends to achieve more in school and contributes to the quality of life in their communities.

Parental attitudes toward school have a tremendous impact on the attitudes of children. According to **Gordon (1970)**, **Bibel (1970)**, and **Bronfenbrenner (1974)** as cited in the Georgia State Department of Education's Handbook, when administrators and educators reach out to parents to encourage their active participation, a more effective education will be provided for children.

The assumption of a variety of responsibilities should be assumed by administrative staff persons during the program's formative stages. One such responsibility may be stressing to teachers that some basic knowledge about each child's home environment aids in the teacher's understanding of how the child will function on school tasks. Many children live with grandparents, other relatives, or in foster homes rather than with their own parents. Full-time employment of the mother, single parent families, unemployment of the father, and a large number of family members, such as extended families, may create problems and pressures that affect all family members. Knowledge of the many kinds of family circumstances can contribute infinitely to understanding the individual child's needs.

Administrators should seek creative ways to involve all parents in the learning experiences of their children; therefore, strategies are included which will develop and nurture positive parent-teacher relationships. No one approach works in all situations. Consideration should therefore be given to all these approaches.

Workshops

Aim: To introduce the parents to the kindergarten program regulations and guidelines.

Parent's Handbook

Aim: To identify and complete specific tasks that support the program. The orientation provides faculty, staff, and administrative personnel with an opportunity to involve parent(s) as tutors, aides, attendance monitors, fund raisers, field trip monitors, clerical helpers, and media coordinators.

Volunteer Program

Aim: To assist with "day to day" operation of the kindergarten program.

ACHIEVING PARENT INVOLVEMENT

Discussion - to stress the importance of progress reports, the importance of parent advisory groups, task forces, and other school programs designed to encourage community, school, parent interaction.

Communication Centers Incorporated with Parent Organizations - to help promote person-to-person and day-to-day communication as a vital key to an effective home-school partnership.

Training Programs - to give parents skills as classroom aides; prepare them for other volunteer positions.

PROCESS OF INVOLVING PARENTS IN THE SCHOOL PROGRAM

RECRUITMENT

School personnel is responsible for recruiting the parent(s) with the intent of involving them in primary and supportive roles with regard to the program.

HOW?

- Letter of invitation
- Commitment form
- Personal interview

WHY?

- To inform parent(s) about their role in the program.
- To identify parents' interests, talents, and needs.
- To encourage parent(s) participation.
- To promote interest and involve the community in the program.
- To insure community support for the program.

PARTICIPATION

Parent(s) participate in the program through informal and formal activities.

***Informal Participation**

As soon after the children are selected (1985-86 school year)/registered (1986-87 school year), and if possible before they begin the program, the school staff should assist the parent(s) to develop and participate in a variety of informal activities. These informal activities will help parent(s) to:

- Get to know the school personnel.
- Learn more about the components of the kindergarten program.
- Learn their roles and responsibilities in support the program.

***Formal Participation**
As the parent(s) and staff get to know each other and identify some of their needs and interests, the staff should assist the parent(s) to develop and participate in the program in a more formal manner.

HOW? The staff should:
- Hold group committee and school advisory committee meetings.
- Conduct training sessions for elected representatives.
- Recruit and train parent(s) to work as paid and volunteer workers at school.
- Assist the parent(s) to plan workshops on:
- Child Growth and Development
- Parent-Child Relations
- Family Health and Safety
- Community Resources and Problems
- Consumer Education
- Career Development
- Culture and Heritage

WHY? These more formal activities help the parent(s) to:
- Gain a deeper understanding about parental role and responsibilities.
- Enrich the children's program.
- Broaden their knowledge of available community services needed and community problems.

INVOLVEMENT

As the staff assists the parent(s) to increase their participation, they should become more involved in the school's program.

HOW? Parent(s) can be involved as:
- Consultants to staff and other parent(s)
- Instructional assistants
- Members of policy groups
- Curriculum planners
- Home visitors
- Members of steering committees
- Training sessions conductors
- Extracurricular planners
- Fund raisers
- Members of advocacy groups

COMMUNICATING WITH PARENTS

WHAT IS KINDERGARTEN?

Kindergarten may be the first formal learning environment that the child encounters. As such, making the transition from home to school should be given careful consideration in order to make the change as easy as possible for the child. Kindergarten stresses development of the total child, enabling the child the grow socially, mentally, physically, and emotionally. The child will be given the opportunity to develop competence and self-confidence in learning areas such as language development, motor development, mathematics, creative play, and music. The child is not expected to learn to read during the kindergarten year, but rather is acquiring skills which will ready him/her for the more formal instruction to follow in the elementary grades.

WAYS TO COMMUNICATE PROGRAM INFORMATION TO THE COMMUNITY

***Information Brochure**
The first step in writing a brochure is to determine a philosophy which reflects the planned kindergarten program in the community. What are kindergarten program goals? What does the district believe about the value of the kindergarten educational experience?

The philosophy is important because it will help the parents and others understand the purpose of kindergarten. It will explain that five year olds are ready to learn, and proposes how learning will occur. The program's philosophy is the vehicle to communicate to the parent(s) and public an understanding of the educational needs and aptitudes of all participants and that kindergarten will be a significant learning experience for children.

The brochure should include details of the district's program -- where the kindergarten classes will be located, when and how to register, what children are eligible and important dates of the school year.

The medium is the message, so careful attention should be given to the appearance of the brochure. It should be attractive to entice people to read the information. Enough copies should be available for all school personnel, PTA meetings, speaking engagements at various civic organizations, and distribution in public places. Copies for legislators and other public officials should be made available also.

PARENT HANDBOOK

A Parent Handbook, given to each parent or guardian at the time of registration, is an excellent vehicle for communicating philosophy, goals, and policies of the kindergarten. The handbook should include a brief statement of the local staff's plan for program implementation based on the State Department of Education **Kindergarten Guidelines.** It is an ideal way to reinforce the school's desire to work cooperatively with the parents.

The handbook can be simply made of two or more sheets of colored paper (8½x14) folded and stapled in the center to form a booklet. The information presented should be easy to read, easy to refer to, and simply expressed. Below is a possible format:

I. Philosophy

II. Staff
  -Qualifications
  -Names of teachers/principal
  -Address and phone number of the school

III. Calendar
  -First day/last day
  -Special events
  -Holidays
  -Open house

IV. Role of Parent(s)
  -Visitation policy
  -Cooperative participation
  -Teacher-parent conferences
  -Open house, parties, field trips

V. Program Goals

IV. Curriculum Design and Implementation of Program
-Size of classes
-Teacher/pupil ratio
-Methods of teaching
-Method of evaluation
-Materials which parents may supply to supplement those provided by the school district for program implementation

VII. Physical Facility

VIII. Health and Safety
-Immunization and vaccination requirements

IX. Miscellaneous
-Fees
-Transportation: arrival and departure times
-Lunch
-Bad weather policy
-Names in coats; change of clothing

Parent(s) appreciate a well-organized informative handbook; it initially speaks for the organization of the program itself.

DEVELOPING THE NEWSLETTER

A newsletter is perhaps the most effective and simplest way of communicating with each parent on a regular basis. Through a monthly newsletter, parents are able to ascertain what is happening at the kindergarten, and thus they feel more a part of their child's world. The newsletter can actually act as a stimulus for conversation between the parent(s) and child, the parent(s) and teacher, and between parent(s). The responsibility for developing the newsletter could be that of the Early Childhood Coordinator in each school district.

The newsletter keeps the parent(s) in touch with classroom activities, and also serves as a vehicle for relating information about upcoming functions. Parent(s) enjoy scale drawn calendars showing projected events, such as field trips or special programs. A newsletter can also relate informally and extend the kindergarten experience. It can also be a good vehicle for asking for volunteer help from parent(s) to meet various school needs.

A good newsletter should be attractive, on colored paper if possible, easy to read with various cartoons and illustrations to add interest, and varying formats. In summary, a newsletter is an easy way of sharing highlights of the child's kindergarten experiences and previewing future events.

The monthly newsletter to parents will encourage volunteerism without pressure. The family member can volunteer when the class is studying something that is of interest to the family member.

Several approaches for achieving parent participation are:

- Letters - When a child's name is received to enroll in kindergarten, a letter welcoming and inviting the family to school for a visit and to an orientation session would encourage interest.

- Clubs, organizations - Community oriented clubs may be given the opportunity to be utilized in school programs. These groups may help in conducting story hour, assisting in vision checks, hearing screenings, monitoring the playground, and building playground equipment. Senior citizens are valuable resources to be utilized in every area of the school. The list of volunteers and the utilization of these volunteers are limited only by one's imagination and ingenuity.

PARENT-TEACHER CONFERENCE

A desirable parent-teacher relationship means that the participants are partners in planning for and working with the child. Teacher and parent need to share their experiences with the child to gain essential information for planning educational experiences.

Inservice for Parent Involvement

In years past parent(s), teachers, and administrators met to solve problems. Today parent(s) must be involved in the total learning process. With this involvement the parent becomes more accountable for school success or failure of the child.

The parent involvement policy will work well if the administration allows the parent(s) to become a partner to the overall program formation of goals and objectives of the educational process. This is accomplished through proper communication channels.

The parent(s) should be allowed to spend time in the classroom; therefore, the school becomes an extension of the home and the learning environment. This may be accomplished through an organized policy that insures uninterrupted instruction of the students.

If there is common ground between the school and the home, the network of a good working relationship is in place. The role of the parent(s) is indispensable in the total educational process.

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PARENTS IN THE LEARNING PROCESS

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RESOURCE LIST FOR PARENTS, ADMINISTRATORS, AND TEACHERS

RESOURCE LIST

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Reference Code
A — Administrators
T — Teachers
P — Parents

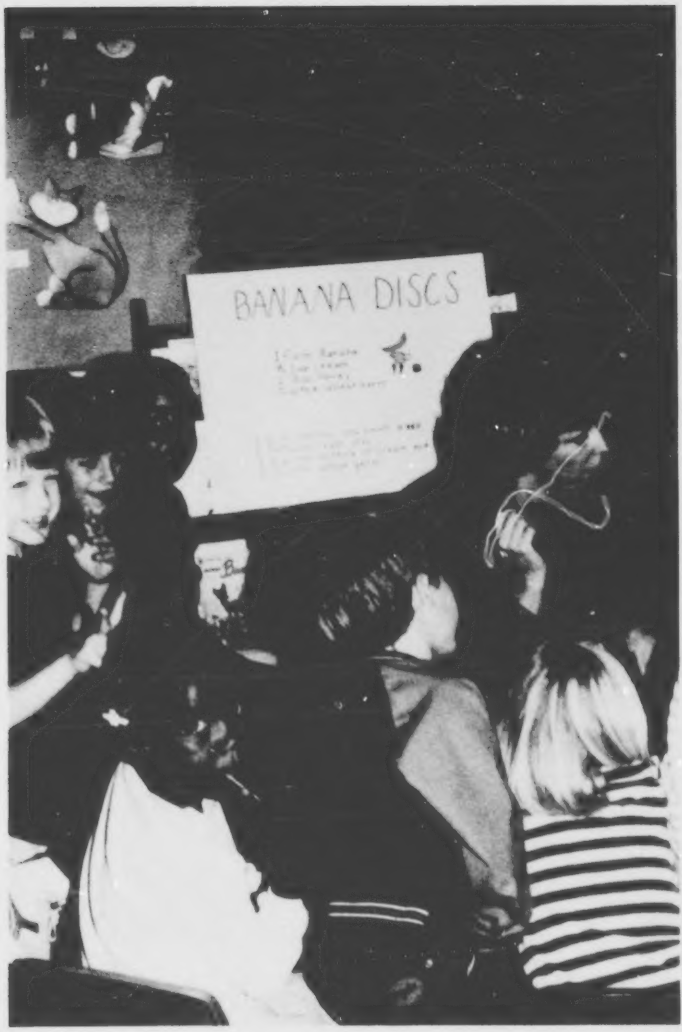
GLOSSARY

Kindergarten — that portion of the elementary school program serving children who have reached the age of five years on or before the date set by law for entrance into first grade. The program philosophy reflecting child development principles shall be evident in curriculum content and through the learning center instructional approach evident in the classroom.

Learning Center — is an area in the learning environment which contains a collection of activities and materials to teach, reinforce, and/or enrich a skill or concept.

Curriculum Activities

Cooking


BANANA DISCS

Cooking in the Kindergarten Classroom

RATIONALE

The cooking center can be one of the best areas for integrated learning in an Early Childhood Education program. Well-planned cooking activities can contribute to learning in all areas of the curriculum: social studies, science, math, and reading readiness. To insure integrated learning, every cooking experience should have a purpose and should relate to the weekly unit topic.

The process of the cooking activity, not the product, is the most important aspect of cooking with young children. The children should be actively involved in the whole process, not just passive learners who only sample the end products. There is a Chinese proverb that states this idea simply, "I hear and I forget; I see and I remember; I do and I understand." To promote understanding through involvement, much prior planning by the teacher is necessary and is required before the children become involved.

Children can relate cooking at school to cooking at home. Because the child is familiar with most of the equipment used s/he will feel secure and eager to try a new experience. A positive self-concept will be enhanced when s/he sees and tastes the finished product. Children are more likely to try new foods if they have had a hand in preparing them.

A child who is having difficulty with motor coordination can experience success in the cooking center. By carefully structuring the cutting, chopping, mixing or other cooking skill to the developmental need of the individual child the teacher can insure that success.

Cooking experiences are some of the best instructional activities to develop sensory awareness. Children can discover various textures, odors, sounds, sights, and tastes involved in food preparation. These experiences also take advantage of a child's natural curiosity to make these discoveries.

CONCEPT LEARNINGS

Before listing the concept learnings in the major areas of the curriculum, it is important to note that cooking experiences can contribute to skill development in music and art. Children can develop their artistic talents by creating their own tie dye fabric from vegetable dyes or by making their own design with a food sculpture. Food can inspire musical activities when dried gourds or rice placed in empty baking powder cans become shakers that create an interesting rhythm.

Social Studies Concepts

- develops cooperation among group members
- encourages development of proper table manners
- emphasizes necessity of taking turns
- promotes sharing among children
- illustrates consumer goods and services
- develops understanding of regional and foreign customs and foods
- explains basic human needs
- allows for comparison of holidays in various cultures
- promotes learning about home activities
- encourages learning where foods come from and how they are transported
- encourages making choices
- introduces basic economics

Science Concepts

- understanding fundamental scientific principles appropriate for specific developmental level
- developing of a scientific problem-solving approach to decisions
- developing of the discovery approach to learning
- understanding differences in solids and liquids
- examining of how matter changes by heating and cooling
- noting differences in animal and vegetable products
- using many parts of plants including seeds
- developing of sensory awareness
- learning how food grows
- understanding basic food groups

Math Concepts

- developing measurement understanding
- understanding quantities
- matching one-to-one
- counting skills
- developing concepts related to fractions
- developing an understanding of more or less
- developing an understanding of weighing
- developing an understanding of passage of time
- understanding of equivalence
- reinforcing concepts of size and shape
- developing comparisons of volume, height, weight, length, width
- developing an understanding of division of portions

Reading Readiness Concepts

- listening to and following directions
- learning new vocabulary
- reading pictures
- matching objects to pictures
- sequencing actions
- learning left to right progression
- learning top to bottom progression
- reading plans and recipes
- gaining oral communication skills

SELECTED VOCABULARY TO BE TAUGHT

By involvement with the individual recipes, children can learn names for utensils, appliances, ingredients, and process words. The teacher can elicit responses for words the children already know, and can guide the children toward the discovery of words they do not know. Working with the concrete helps a child better understand unknown terms.

Action Words

combine
mix
beat
scrape
crack

ice
spread
stuff
sprinkle
peel

dredge
pit
pare
core
soften

pour
dissolve
measure
warm
bite

Action Words (cont.)

refrigerate
grate
grind
boil
simmer
bake
broil
divide
brown
cool
toss
coat

sizzle
bubble
stir
heat
sift
chop
dice
slice
strain
steam
freeze

knead
half
quarter
toast
roll
shape
smell
cream
pat
rinse
melt

cut
chip
add
melt
press
preheat
chew
drizzle
fold
dip
cover

Temperature

hot
degrees
chill

cold
heat
lukewarm

cool
preheat
frozen

warm
boiling
steaming

Time

instant
gradually
timer

overnight
slowly
alternately

next day
hour
second

minute
quickly
at once

Size

large
huge
medium

small
miniature
little

bite-size
tiny
chunks

Shape

round
cube

square
rectangle

circle
oval

oblong
flat

Quantity

degrees
package
pint
a few
a pinch
dozen
both

tablespoon
teaspoon
cupful
quart
square
less
some

pound
ounce
a dash
double
triple
approximate
more

short
long
whole
half
cup
bunch
bag

Ingredients

meats
fish
poultry
fruits

ginger
parsley
sage
rosemary

shortening
margarine
butter
vanilla

cream of tartar
baking soda
wheat germ
oil

Ingredients (cont.)

vegetables
seeds
nuts
grains
cheeses
beans
peas
eggs

thyme
salt
pepper
cinnamon
nutmeg
brown sugar
honey
molasses

mustard
cornstarch
whole wheat
flour
white flour
rye flour
rolled oats
baking powder
yeast

peanut butter
coconut
rind
steam
leaves
stalk
gelatin
evaporated milk

Flavor

tart
bitter
spicy

bland
sweet
salty

mild
tang
minty

mellow
sour
hot

sharp
strong
bittersweet

Texture

mealy
smooth
tender
crisp
rough

wet
stiff
dry
hard
tough

bumpy
stringy
compressed
mush
soft

lumpy
creamy
firm
crunchy
moist

granular
sticky

Mixtures

batter
dough
sauce
gel

This material has been adapted from *Creative Food Experiences for Children* written by Mary T. Goodwin and Gerry Pollen.

Below is a suggested developmental sequence for some of the action vocabulary.

I. Sense perception, gross motor skills, and socialization.
  A. Use of senses
    Sight (compare colors and size; predict colors inside of fruits).
    Hearing (sounds food make when thumped, shaken, etc.).
    Touch (compare textures of food on the inside and out).
    Smell (compare odors of spices and foods).
    Taste (compare sweet, sour, salty, bitter and hot).
  B. Dipping (doughnuts into powdered sugar, vegetables into dip).
  C. Tearing, Breaking and Snapping (preparing lettuce, snapping beans).
  D. Scrubbing (cleaning vegetables with vegetable scrubber).

II. Beginning manipulation and eye-hand coordination.
  A. Wrapping (rolling flattened canned biscuits around vienna sausage).
  B. Pouring (mark lines on glasses and fill to line).
  C. Stirring and Mixing (stirring pudding, jello; Ex: Child-made ice cream and icing for cupcakes).
  D. Shaking (shaking a jar of cream - butter, shake n' bake).
  E. Spreading, (soft onto firm; celery good to start with because it won't tear).

III. Finer motions and more complex use of both hands.
  A. Rolling (with both hands; making cheese pretzels, play dough and peanut butter balls).
  B. Squeezing (put damp cloth under juicer to keep from slipping).
  C. Peeling (with fingers; bananas, colored boiled eggs).
  D. Cracking (raw eggs).
  E. Cutting (soft foods with table knife: bananas, softened cream cheese).
  F. Sifting
  G. Shelling (beans, peas, peanuts).
  H. Beating (with a spoon).

IV. Coordination and working against resistance.
  A. Cutting (firm foods with table knife; peeled apples, celery, carrots, peeled cucumber).
  B. Grinding (cheese, nuts).
  C. Beating with egg beater (Soap and water play helps to prepare for this and see quick results.).

V. Fine coordination and understanding of sharpness.
  A. Peeling (with vegetable peeler).
  B. Grating (begin with rectangles of cheese).
  C. Slicing with sharp knives.
  D. Chopping (nuts, vegetables).

INSTRUCTIONAL TECHNIQUES

Instructional techniques appropriate for kindergarten age children in the cooking center are demonstration, discovery, and activity. The appropriate technique depends on the teacher's desired outcome of the experience.

At times the teacher may have to demonstrate to the children how to perform a certain process, such as grind, chop, dice, or mix together. The teacher should be careful, though, to choose recipes where the children are ultimately more involved than she is.

Children can be involved in discovery learning by such activities as: 1) mixing food coloring to make secondary colors from primary colors, 2) observing the changes that take place when heat is added to ingredients, and 3) creating new recipes. Even with young children it is important to encourage making predictions, observing occurrences in detail, verbalizing the processes, and making comparisons of predictions to actual outcomes to help children in the problem-solving process by means of the discovery technique.

Before children can accurately measure, the teacher needs to provide many discovery activities with sand and water. Play activities using a sand or water tray with measuring cups, spoons, and various packaging containers promote the coordination required in pouring from one container to another and in filling completely one measuring container. During these discovery activities the teacher can develop necessary measurement vocabulary such as pack, level, pour, scant, and cupful.

The activity instructional technique will probably be used the most. This approach emphasizes the child being involved with the foods while the teacher serves as the guide through the experience.

Whatever the instructional technique employed, the major goal should be to encourage children to develop independence and positive self-concepts when they are actively involved in a successful learning experience. Success does not depend entirely on the finished product; therefore, by having a positive attitude, patience and placing emphasis on important concepts and skill development the teacher can guide the children toward a successful experience.

The teacher's preplanning is vital in order for children to achieve success. The teacher needs to: 1) decide on the purpose of the cooking experience and what objectives she wants to emphasize, 2) choose a recipe that is appropriate for the developmental levels of her children, 3) write the recipe neatly on large chart paper or on 9 x 12 cards, 4) gather all of the necessary foods and equipment to complete the recipe, 5) decide on the number of children who will be involved at any one time, 6) set up the cooking center. Preplanning also includes putting the cooking center out of the traffic flow. All staples, utensils, and equipment should be stored in the area for easy access. Labeled boxes for storage encourage the children to help with clean-up.

Plan for small groups (4 or 5 children) to be involved at one time in the activity. All children do not have to cook each time. If frequent cooking activities are planned, if the teacher keeps a list of the children's involvement, and if she chooses her recipes wisely, then all children will be able to cook often. An example of a recipe where all the children are involved is Peanut Butter Balls. The teacher works with a small group for mixing the dough. Then each child gets to make an individual ball and roll it in the chopped nuts.

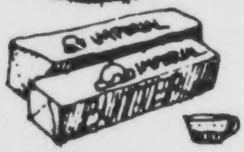
For group cooking, the teacher should write the recipe on large chart paper. Included on the recipe should be concrete examples of picture clues.

Chocolate Crunch Recipe

Ingredients:

JIF
PEANUT BUTTER

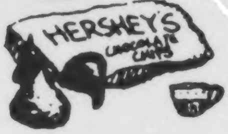
peanut butter ■



soft butter ▬

OAT
Granola

granola or oatmeal ▲


HERSHEY'S
CHOCOLATE CHIPS

chocolate chips ●

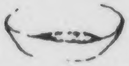
raisins ⬬

vanilla extract ★

COCONUT
SHREDDED

shredded coconut ⬣

To Make:

Mash ■ and ▬ together in a  .

Stir ▲, ●, ⬬ and ★.

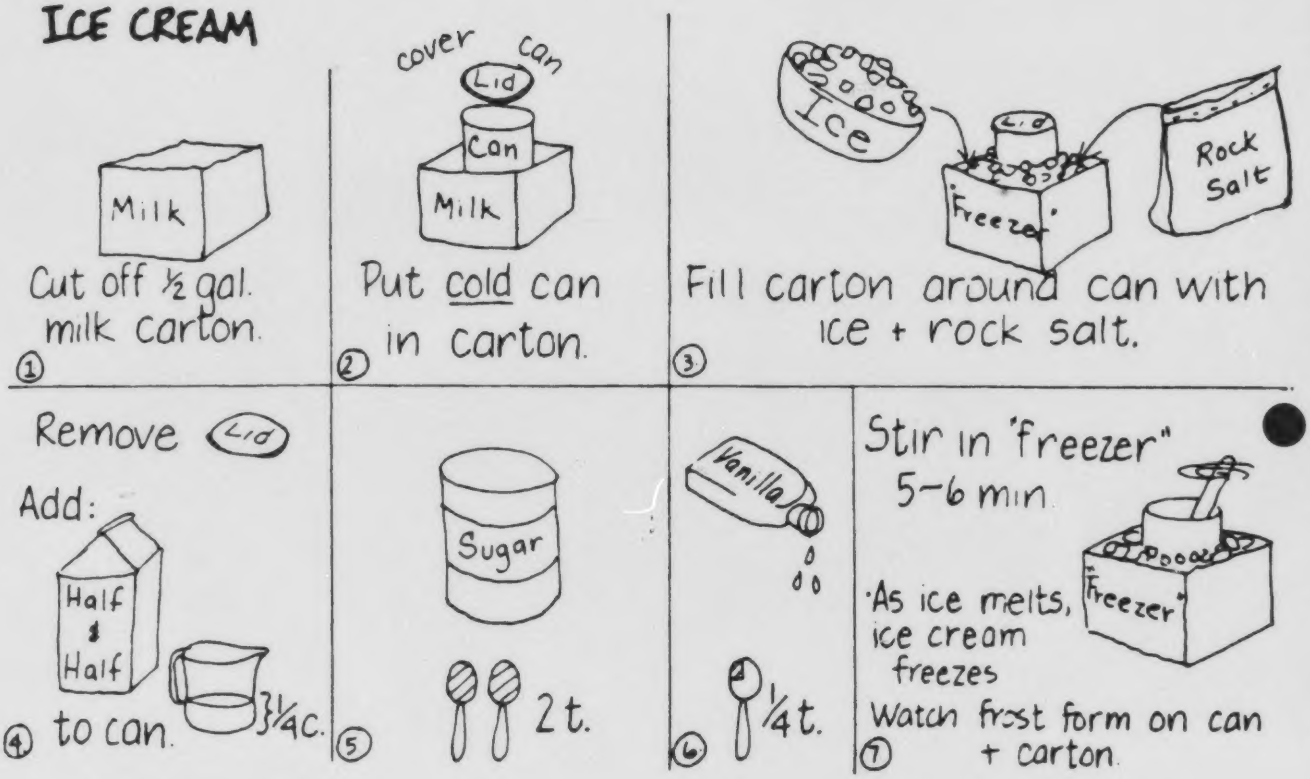
Roll into small balls.

Roll in ⬣ .

*Taken from "The Kitchen: A Unique Learning Center" written by Patricia Jobe and Rachel E. Washington, Dimensions, January 1981.

Cup cooking allows for individualized cooking. The recipe makes one individual portion. Recipes should be written with each step illustrated on a single piece of 9" x 12" poster board. For durability the recipes should be covered with clear contact paper. Cards are placed in left to right sequence directly behind each ingredient. The children move from left to right following the directions (picture clues) on the cards.

ICE CREAM


Milk
cover can
Lid
Can
Milk
Ice
Lid
Freezer
Rock Salt
Lid
Half & Half
Sugar
Vanilla
Freezer

① Cut off ½ gal. milk carton.

② Put cold can in carton.

③ Fill carton around can with ice + rock salt.

④ Remove Lid
Add: to can. 3¼c.

⑤ 2 t.

⑥ ¼ t.

⑦ Stir in "freezer" 5-6 min.
·As ice melts, ice cream freezes
Watch frost form on can + carton.

*This material was taken from "A Child's Cookbook".

Two plastic dishpans for washing and rinsing should be included in the cooking center. The teacher needs to demonstrate to the children how to correctly wash, rinse, drain, and dry the cooking utensils. To make sure that the utensils are clean, an adult should wash them thoroughly after the cooking experience is over.

Following is a list of hints for the teacher to keep in mind during each cooking experience.

Helpful Hints

1. Initial experiences should have few steps in order to give the children the experience of working with food.
2. Gradually add more steps to the experiences.
3. Explain the necessity of washing hands before all cooking experiences.
4. Make sure the work area is clean and explain the importance of a clean work surface to the children.
5. Go over every step of the recipe carefully with the children before starting, explaining new terms and demonstrating new techniques.
6. Have all utensils readily available. Make sure there are enough utensils to keep the activity moving.
7. Have a clean sponge and a bowl of water available for quick clean-ups.
8. Explain ahead of time that children are not to put the food in their mouths. If they must cough or sneeze they should turn away and cover their mouths. Most important is to explain why.
9. Make children aware of sharp knives, graters, parers. Carefully supervise use of these utensils.
10. Keep all potentially dangerous utensils away from children.
11. Make sure that all children involved in the cooking experience have a chance to see, smell, feel and possibly taste the ingredients before they are combined.
12. Encourage children to observe and talk about contrast, color, texture, size and shape.
13. Encourage all those who participated in the activity to share the responsibility of cleaning up.
14. Since the eyes eat first, the food should be appealing to look at as well as to eat.
15. Repeating the same cooking activity several days in succession helps solidify what children have learned.
16. Always try the recipe at home before attempting it with the children.
17. Choose recipes that are pertinent to the unit or theme of study. Books can often lend ideas (For suggestions see story list following the recipes in the activity section.).
18. Allow enough time for discussion, observation, touching, tasting and comparing. Use every step in the cooking experience as an opportunity for the children to expand their learning.
19. Find out if any children are allergic to any foods before starting the cooking program.
20. Let children help establish rules for the cooking center.

INSTRUCTIONAL MANAGEMENT

The following objectives are examples of how to state behavioral objectives in measurable terms. The first objective in each curricular area is illustrated by a specific recipe in the activities section.

Social Studies Objectives

The children will cooperate and share to make vegetable soup.
The child will be able to complete a recipe requiring cooperation among group members.
The child will be able to identify specific foreign foods (relating to the unit topic).
The child will be able to describe at least three proper table manners.

Science Objectives

The child will be able to identify four vegetables that grow underground.
The child will be able to identify examples of vegetables which have stems that are good to eat.
The child will be able to describe the changes that occur when vegetables are cooked.
The child will be able to observe similarities and differences among ingredients including color, shape (flat, wavy, round), liquid or dry, etc.

Math Objectives

The child will be able to complete a metric recipe.
The child will be able to set the table for a specific number of people.
The child will be able to accurately measure the ingredients for a specific recipe.
The child will be able to take as many carrot sticks as he has buttons or birthdays.

Reading Readiness Objectives

The child will be able to make a list of foods that include the word butter.
The child will complete a cup cooking activity moving from left to right.
The child will be able to verbalize the steps involved in a recipe in proper sequence.
The child will be able to interpret a recipe chart utilizing concrete and picture clues.

An important, and often omitted, part of the cooking experience is evaluation. Evaluation should be considered from the aspect of the child's performance and from the value of the experience. An informal type of evaluation made daily is through teacher observation.

How the child's performance is evaluated depends on the particular recipe, the skills to be stressed, and the objectives to be accomplished by the cooking experience. Periodically, the teacher may wish to make a checklist of the skills involved, such as: 1) Could the child chop (grate, dice) the carrot correctly? 2) Could the child properly mix the ingredients? 3) Could the child roll out the dough? 4) Could the child measure the ingredients accurately?

The teacher may simply want to check if the child can successfully follow the recipe through to completion or to explain the steps involved in the recipe. By noting a child's difficulties, the teacher can plan activities (cooking or noncooking) to help the child with his or her individual problems.

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When the teacher evaluates the value of the cooking experience, s/he should ask him/herself several questions at the conclusion of the activity. S/he might ask: 1) Was each child in the group involved in the recipe preparation? 2) Were there adequate opportunities for the children to practice sharing and cooperation? 3) Were new vocabulary words adequately explained and reinforced? 4) Were as many of the children's senses involved as possible? 5) If mistakes were made, were they turned into learning experiences? 6) Did the activity build self-concepts? 7) What changes need to be made in the activity before it is repeated? 8) Did the cooking experiences enrich the curriculum?

GENERAL MATERIALS LIST

For preparation

knife
vegetable parer
vegetable brush
bottle opener
grater
fruit juicer
wire strainer
colander
can opener
cutting board
food grinder
plastic serrated knives

For measuring

transparent graduated measuring cups
liquid measuring cup
straight-edged spatula
rubber scrapper
measuring spoons
sifter

For mixing

wooden spoons
mixing bowls
wire whisk
fork
egg beater
rolling pin
cookie sheets
blender

For cooking

skillet
saucepans
potholder
hot plate
popcorn popper
wax paper, plastic bags, aluminum foil
coffee cans and plastic containers
paper plates and cups

For clean-up

dish pans
small sponges
dish drainer and tray

II. ACTIVITIES

Title: Vegetable Garden Soup (Social Studies Objective)

Objectives: The children will cooperate and share to make a soup.

Materials:

Root - potatoes, onions, carrots
Stem - celery
Leaves - parsley
Flower - cauliflower
Fruit - tomatoes
Seed - peas
Others - if desired.

Salt
Pepper
Beef bouillon
Paring knife
Colander
Soup kettle
Cutting board

Each child may bring a vegetable from home.

Procedure:

1. Have the children wash the vegetables well and prepare them for the soup.
2. The vegetables should be about the same size so they will cook in about the same time.
3. Heat about 2 quarts of water in the soup kettle until hot.
4. Dissolve the bouillon in hot water (about 3 cubes per quart of hot water).
5. Remove the pan from the heat.
6. Very carefully, have one child at a time drop his or her vegetables into the pot.
7. Cook until the vegetables are tender.
8. Season with salt and pepper.
9. Serve for snack or lunch.

Title: Underground Vegetables (Science Objective)

Objective: The children will be able to identify some vegetables that grow underground.

Materials:

- Radishes
- Beets
- Scraper
- Paring knife
- Carrots (with tops if possible)
- Potatoes (white or sweet)
- Large paper bag
- Pictures of other root vegetables growing
- Turnips
- Onions
- Cutting board

Procedures:

1. Vegetables are plants.
   We eat many parts of the plant.
   The part of the plant that grows underground is the root.
   Do you know what underground vegetables are called?
   Root vegetables, tuberous (potato) and fleshy (carrot) roots are the kind you eat.
   Do other plants have roots?
   What are roots for? Through the roots, the plants are furnished with food and water from the soil.
2. Point out that most root vegetables have a skin to protect them.
   Some skins such as a carrot skin may be eaten, but onions should be peeled because the skin has a bitter taste.
3. Pass around the root vegetables; discuss the color and texture of the skin (smooth, silky, bumpy, rough).
   Which vegetables are good to eat raw or cooked?
4. Play a guessing game.
   Put the vegetables in a bag.

Close the bag, leaving enough room for a small hand to slip in and out.
Ask each child in turn to put his or her hand in the bag, pick a vegetable, name it and pull it out to see if the naming is correct.

5. Have the children wash, scrape, or grate a vegetable. If a carrot is prepared, make carrot sticks. Carrot curls can be made by slicing scraped, raw carrots lengthwise with a slicer into paper-thin slices. Roll up and fasten with a toothpick. Place in ice water to curl carrots.
6. Why are root vegetables good to eat?
   They give us energy. Deep yellow vegetables such as sweet potatoes, carrots and rutabaga are rich in vitamin A. Vitamin A is important for healthy eyes. Vegetables contain fiber and minerals for maintaining healthy bodies. Vegetables which are eaten raw stimulate gums, clean the teeth and promote good dental health.

*The two preceeding activities were adapted from Creative Food Experiences.

Title: Apple Popcorn (Math Objective)

Objectives: The child will be able to complete a metric recipe.
The child will be able to describe the difference in volume of unpopped and popped corn.

Materials:
Popcorn
1 stick margarine
250 ml chopped diced apples
125 ml brown sugar
5 ml apple pie, pumpkin spice, or cinnamon
Popcorn popper
Large bowl
Small saucepan
Hot plate

Procedure:
1. Set 5 liters of unsalted popped corn aside in a large bowl.
2. Melt 113g (1 stick) margarine in a small saucepan.
3. Add 250 ml chopped dice apples.
   125 ml brown sugar
   5 ml apple pie, pumpkin spice, or cinnamon
4. Cook until apples are puffy and beginning to turn brown.
5. Carefully pour sugar mixture over popcorn. Toss with corn until evenly coated.

Title: Homemade Butter (Reading Readiness Objective)

Objective: The child will be able to make a list of foods that include the word butter. (Buttermilk and butterscotch can start the list).

Materials:
Whipping cream
Salt
Yellow food coloring
Baby food jars

Procedure:
1. Pour 1/4 cup whipping cream into each of 4 baby food jars.
2. Add a few grains of salt and 1 drop food coloring in each jar.
3. Tightly close each jar.
4. Shake for several minutes.
5. Pour off any liquid.
6. Serve immediately, or chill and then serve.
7. While the children are shaking the jars, they might discuss things to eat butter on or things in which we eat butter.
8. While the children are eating their butter (spread on crackers or bread)they can list the foods that are included in the word butter.

The following are recipes that have been proven successful with young children. Most of them can be used to accomplish a variety of objectives depending on the unit topic and depending on the concepts the teacher wishes to express.

Potato Latkes (traditional Jewish dish)

2 cups grated raw potatoes
(measure after draining)
2 eggs, beaten
1 teaspoon salt
2 tablespoons flour
½ teaspoon baking powder
1 small onion, grated (optional)

Combine and mix ingredients well. Drop by tablespoonful onto hot, greased skillet. Flatten to taste. Fry on both sides until brown. Serve with sour cream or applesauce..

Hot Mulled Cider

1 quart cider
3 whole cloves
2 whole allspice
2 sticks cinnamon
½ teaspoon ground nutmeg

Combine and simmer for 30 minutes. (Put allspice and cloves in tea bag.)

Golden Cow

1 can frozen orange juice (6 ounces)
1 cup nonfat dry milk
1 teaspoon vanilla
1 cup water
2½ cups ice water

Blend in blender (add ice cubes gradually).

Popcorn Balls

2½ quarts popped corn
1 cup sugar
½ teaspoon salt
1 teaspoon vinegar

½ cup water
½ cup corn syrup
½ teaspoon vanilla
butter

Measure popped corn into large buttered bowl. In heavy 1½ quart saucepan, combine the sugar, water, corn syrup, salt, and vinegar. Cook and stir until sugar is dissolved. Continue cooking, stirring constantly, to 260 degrees F on candy thermometer (or until a small amount of mixture dropped into very cold water forms a hard ball). Remove from heat. Stir in vanilla. Pour syrup evenly over popped corn, stirring to coat each kernel. Give each child a square of waxed paper and spoon out the popcorn mixture. Butter hands and shape mixture into 2½" balls. Place on waxed paper.

Trash

6 tablespoons butter
1 teaspoon salt
2½ teaspoons soy sauce
½ teaspoon onion powder or garlic salt
2 cups each Corn Chex, Rice Chex, and Wheat Chex
1 cup salted nuts

Melt butter in electric skillet at 200 degrees. Stir in seasonings. Blend. Add ingredients and stir until all are coated. Cover with lid. Keep vents open. Heat at 250° degrees for 15 minutes. Cool on absorbent paper.

Applesauce

½ apple for each child
½ stick cinnamon
½ cup water
½ cup sugar
½ teaspoon nutmeg

Core, peel, and quarter apples. Boil in water with cinnamon 15 to 25 minutes. Add sugar and nutmeg. Mix well. Mash, using hand mixer or wire whisk or potato masher. Serve in small paper cups.

Pancakes (makes 15-18)

1. 1 cup milk
2. 2 tablespoons melted margarine
3. 1 egg
4. 1 cup sifted flour
5. 2 teaspoons baking powder
6. 2 tablespoons sugar
7. ½ teaspoon salt

Pour 1, 2, and 3 into a large bowl. Beat lightly. Add 4, 5, 6, and 7. Stir all ingredients together. Lightly grease a frying pan or skillet and heat it over medium heat. Pour batter into pan to make the size pancake you want. Turn when bubbles form on top.

Melted Cheese Chews

Whole wheat bread
Margarine
Cheddar Cheese

1. Cut whole wheat bread into strips or triangles.
2. Spread with margarine.
3. Grate cheese.
4. Sprinkle cheese on bread.
5. Toast in oven, broiler, or toaster oven until melted.

Banana Discs

1 firm banana
¼ cup cream
2 tablespoons honey
toasted wheat germ

1. Slice banana into small discs.
2. Toothpick each disc.
3. Dip in cream and honey mixture.
4. Roll in wheat germ.

Tortilla Treat

1 flour tortilla
tub soft margarine
cinnamon/sugar

Spread tortilla with margarine. Shake on cinnamon/sugar. Roll and place in toaster over. Bake at 325° until brown.

Cup Gingerbread

3 tablespoons Gingerbread mix
1 tablespoon water

Put mix in paper cup. Add water and stir well. Put cup in electric skillet and bake at 400° for 15 minutes or until done.

Peanut Butter

peanuts (roasted in shells)
corn oil
salt
bread or celery

1. Have the children remove the peanuts from the shell; remove the brown skins.
2. Put about 1½ tablespoons of oil in the blender. Gradually add about one cup of peanuts and sprinkle lightly with salt. Blend until mixture is smooth.
3. Spread on bread or stuff the peanut butter into celery ribs.

Ice Cream Muffins

2 cups softened ice cream
1½ cups self rising flour

Mix together. Pour in greased muffin tins 1/2 to 3/4 full. Bake at 400° for 15 minutes. Flavor sets in as they cool.

Chocolate Yummies

1 (6 oz.) package chocolate bits
1/3 cup margarine
16 large marshmallows
1/2 tsp. vanilla
1 cup shredded coconut
2 cups rolled oats

Melt chocolate, margarine, and marshmallows. Stir until smooth. Remove from heat. Add vanilla, coconut, and oats. Mix well. Drop by teaspoon on waxed paper covered cookie sheet. Refrigerate.

Metric Peanut Butter Balls

2 egg yolks
5 millimeters vanilla
1 gram salt
235 grams crunchy peanut butter
140 grams powdered milk
250 grams powdered sugar

Beat egg yolks, vanilla, and salt. Add peanut butter, powdered milk, and powdered sugar. Mix well. Make into balls and roll in remaining sugar.

Peanut Butter Fondue

2 cups chunky peanut butter
1 (5 1/3) oz. can evaporated milk
1 cup light brown sugar
1/4 cup margarine
1/8 teaspoon salt

Mix all ingredients. Cook in heavy saucepan over low heat until well blended and hot. Stir occasionally. Dunk: apple wedges, marshmallows, sliced bananas, pieces of graham crackers.

Fa Shang Do (from China)

1 cup sesame seeds
1 cup brown sugar
1 cup maple syrup
1 cup peanuts
4 cups puffed rice cereal

Mix sugar and syrup in a large, heavy pot. Cook until mixture thickens (5-8 minutes). Stir often. Mix in sesame seeds, nuts, and puffed rice. Pour mixture into buttered pan and press even with spatula.

Witches Cauldron

4 cups cranberry cocktail
4 cups apple cider
2 cinnamon sticks
1/2 teaspoon ground nutmeg

Pour everything in a saucepan. Heat and simmer with cover on pan for 10 minutes. Serve hot.

Unbaked Peanut Butter Cookies

1 cup sugar
2 cup white corn syrup
2 cups peanut butter
4 cups Special K cereal

Combine sugar and syrup. Boil for 1 minute. Add peanut butter. Add cereal. Drop from teaspoon onto waxed paper.

Aggression Cookies

3 cups oatmeal
1 1/2 cups brown sugar
1 1/2 cups flour
1 1/2 cups butter
1 1/2 teaspoon baking powder

Dump all ingredients in large bowl. Mash it! Knead it! Pound it! The longer and harder you mix it, the better it is. Roll dough into small balls. Bake on cookie sheet at 350° for 10-12 minutes.

Walking Apple Salad

Core ½ apple
One spoonful of peanut butter
Raisins or marshmallows

Wash and cut apples in half. Core apples and put a spoonful of peanut butter in the middle of the apple. Create a happy face using raisins or marshmallows.

Bread Without An Oven

6 eggs	1 cup cream	1 teaspoon salt
1 cup milk	2 cups flour	2 tablespoons melted butter

Beat eggs. Add milk and cream. Mix with spoon. Add flour, salt and margarine. Cook on hot skillet. (Teacher Supervision is required for this activity.)

Basic Rice Krispies Treat

6 cups Rice Krispies
1 cup peanut butter
1 tablespoon butter
1 large package of miniature marshmallows

Melt peanut butter and butter in large pan. Add marshmallows, stirring until melted. Add rice krispies and mix until thoroughly coated. Remove from heat and cool slightly. The mixture can be made into balls* or put in a pan and cut into squares after completely cool. *Slightly buttered hands will be able to handle the mixture with greater ease.

Apple Salad

4 chopped apples
1 cup chopped pecans
1 small can orange slices
1 small container Cool Whip
½ cup raisins

Mix all the ingredients together and serve in individual paper cups or on lettuce leaf.

Impossible Pumpkin Pie*

3/4 cup sugar
½ cup biscuit baking mix
2 tablespoons margarine or butter
1 can (13 oz.) evaporated milk
2 eggs

1 can (16 oz.) pumpkin
2½ teaspoons pumpkin pie spice
2 teaspoons vanilla

Heat oven to 350°. Grease 10" pie plate. Beat all ingredients until smooth, 1 minute in blender on high or 2 minutes with hand beater. Pour into plate. Bake 50-55 minutes. Serve with Cool Whip if desired. *Easy Thanksgiving Pumpkin Pie recipe.

Pimento Cheese Sandwiches

2 cups grated cheese
1/3 cup chopped pimento
¼ cup mayonnaise
1/3 cup pickle relish

Combine ingredients in a bowl and serve on whole bread cut into fourths. Making sandwiches is a good fine motor activity in which children can participate.

Taco Dip

1 package taco seasoning
1 small container of sour cream*
Dorito or Frito corn chips

Combine taco seasoning and sour cream. Serve with chips. *Two small containers of sour cream may be used if seasoning is too spicy for class.

Dill Dip

2 cups mayonnaise
2 cups sour cream
3 tablespoons dill weed
3 tablespoons chopped onion
1 tablespoon seasoned salt

Combine all the ingredients and serve with chips or fresh vegetables such as squash or carrots.

Painted Toast

Paint brushes (to be used only in cooking activities)
Milk
Bread
Food Coloring
Toaster-broiler

Pour ½ cup milk into several glasses. Put several drops of food coloring in each glass (one glass red, one blue and so forth). Dip paint brush in milk and lightly paint the bread. Toast bread until brown. Butter and/or cinnamon-sugar may be sprinkled on toast before eating.

Peanut Butter Balls

1 cup peanut butter
Dry Milk Powder
½ cup honey

Combine peanut butter and honey, mixing until smooth. Add dry milk until a workable consistency is obtained. Form balls on waxed paper.

Play Dough (Not To Eat!)

Uncooked #1

3/4 cup flour
½ cup salt
food coloring
1½ teaspoon powdered alum
1½ teaspoon vegetable oil
½ cup boiling water

Mix dry ingredients. Add oil and water and stir vigorously. Add food coloring and knead. Makes 1 cup.

Uncooked #2

2½ cups flour
1 cup salt
1 tablespoon powdered alum
4 tablespoons vegetable oil
1½ cups boiling water
food coloring

Mix dry ingredients. Add oil. Stir in water. Knead until smooth. Add food coloring and knead again. Store play dough in a coffee can to prolong use.

Books That Lead to Cooking Experiences

Blueberries for Sal

Cook blueberry muffin or pancakes.

Recipe - Prepare muffin or pancake mix according to directions on package. Add blueberries.

Chicken Soup with Rice

Cooking instant chicken soup.

Recipe - Just add boiling water. Don't forget to sing the song.

Bread and Jam for Frances

Cook either homemade bread or jam.

Recipe - Strawberry Jam (use any fruit or berries)
1 cup strawberries
3/4 cup sugar
1 tablespoon Sure-Jell

Mix Sure-Jell with berries in sauce pan. Bring mixture to boil, stirring constantly. Add sugar and boil one minute, stirring constantly. Cool and serve on slices of bread cut in half.

Green Eggs and Ham

Cook green eggs and ham.

Recipe - Scramble eggs, add green food coloring. Add chopped ham to eggs before cooking.

The Carrot Seed

Cook any recipe requiring carrots.

Recipe - Buttered Carrots
8-10 carrots
1 teaspoon salt
butter

Wash and scrape carrots. Slice into 1-inch pieces. Place in a pan containing two inches of water. Add salt and 1 tablespoon of butter. Boil approximately 15 minutes, or until forktender. Dot with butter and serve.

Rain Makes Applesauce

Cook any applesauce recipe.

Recipe - 6 apples
1/2 cup sugar
1 teaspoon cinnamon

Wash, peel, core, and quarter apples. Place all ingredients in a sauce pan with 1-2 cups of water depending on size of pan. Cook approximately 20 minutes, or until tender. Stir occasionally.

Three Little Pigs

Cook Pigs In A Blanket.

Recipe - Cut weiner in half. Wrap with weiner wrap or canned biscuits. Cook 350 degrees for approximately 15 minutes or until browned.

Jack and the Bean Stalk

Prepare bean dip, beenie weenies, or any recipe using beans.
Recipe - Bean Dip

- 1 can refried beans
- 1 cup taco sauce
- 1/2 cup grated cheese
- 1/4 cup chopped onion

Combine all ingredients. Serve with crackers or vegetables.

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Instructional Television

TECHNIQUES FOR USING ITV

STEP I: ORIENTATION

1. Study the Skills Index and select programming to meet student needs and curriculum objectives.
2. Use the ITV Resource Book for descriptions of the individual programs in the series and the series as a whole.
3. For more detailed instructions and helpful suggestions, consult teacher guides.

STEP II: TEACHER PREPARATION

1. Use the ITV Schedule Book to learn broadcast dates and times.
2. Study the teacher guides.
3. Plan to incorporate related media, such as: film, filmstrips, slides, books, and other print materials.

STEP III: CLASSROOM PREPARATION

1. Place the TV where all students can see and hear.
2. Make sure the room is lighted adequately; avoid complete darkness or glare on the television screen.
3. Check television adjustments before the lesson begins.

STEP IV: BEFORE THE LESSON

1. Give students a purpose for viewing.
2. Introduce any special vocabulary that may be needed during the lesson.
3. Distribute to the class any materials that may be needed during the lesson.

STEP V: DURING THE LESSON

1. Take an active interest in the program; participate when participation is called for; react when reaction is required.
2. Make a note of points requiring further development or needing clarification.
3. Set a good example by remaining attentive and alert; do not use this time to correct papers, etc.

STEP VI: FOLLOWING THE LESSON

1. Initiate follow-up immediately...underscore basic concepts...clarify any misunderstandings.
2. Extend the lesson through discussion, investigations, and individual and group activities.

The Skills/Concepts Index, ITV Resource Book, ITV Schedule Book, and Teachers' Guides should be available in the school library or media center. If not, please call Mississippi ETV toll-free: 1-800-922-9698, Jackson area, 982-6736.

The following pages contain a list and descriptive synopsis of instructional television programs for children whose developmental levels range from kindergarten through third grade. The programs may be taped or viewed live at the designated time. Telecast days and times are found within the ITV Schedule Book.

THE CLYDE FROG SHOW Grades 1-3 Ten 15-minute lessons

THE CLYDE FROG SHOW is designed to help preschool and primary children understand and cope better with their own feelings and attitudes. Each of the ten programs contains three stories, which are part-humorous, part-serious dramatizations of typical events in the life of a child. Following each story, all the characters in the story appear in the Talk Show and discuss their feelings about what happened in the preceding story. The characterization is done with puppets and the main characters include: Clyde, a typical school-age frog; his stern but just father, Dr. Frog; his sympathetic mother, Mrs. Frog; his teacher, Mrs. Mulch; and Clyde's friends, Max, Andy, Suzy, Brewster and Linda. The series is not designed to give definite answers to life's problems. Rather, it seeks to help children in two ways: by showing how their actions and words affect others, and by showing that their feelings of fear or doubt are not unique--everyone has them.

ABOUT SAFETY Grades 1-6 Forty-eight 5-minute lessons

ABOUT SAFETY is a series of open-ended lessons designed to help elementary children develop concepts of safe living. ABOUT SAFETY uses puppets to dramatize situations which explain the need for safety rules. Children are exposed to safe and unsafe activities by Clyde Frog, who is the main character. Clyde and his puppet friends learn school safety, fire safety and first aid.

LANGUAGE ARTS/READING

SESAME STREET Grades K-2 Ninety 60-minute lessons

SESAME STREET expands the environment and broadens the horizons of a primary grade child and helps instill favorable attitudes toward learning. In addition, important skills for developing readiness in reading, math and other subject areas are transmitted to the viewing child.

ABOUT BOOKS: PRIMARY Grades K-3 Eleven 5-minute lessons

ABOUT BOOKS: PRIMARY is designed to encourage children to read by stimulating their interest in the books featured in the program--a representative group of some of the best books in children's literature. A program tells only part of the story, thus tantalizing the viewers' interest to read the book for themselves. All programs feature an on-camera narrator, plus one or more of the following elements: dramatization, film, puppetry, children's art and animation.

READALONG I Grades 1-2 Thirty 10-minute lessons

READALONG I is an entertaining series which makes learning to read fun. The first of three READALONG series, the program emphasizes the recognition and understanding of words and their meanings. The review and repetition of words, phrases and sentences are put into meaningful and humorous situations which make reading worthwhile to a student who normally might not think so.

READALONG II Grades 2-3 Twenty-one 10-minute lessons

READALONG II encourages vocabulary building, writing and listening skills, as well as speech and reading. The series is designed to encourage growth in all aspects of language acquisition. Its goal is to help children learn to read with a feeling of excitement, pleasure and desire, and with an understanding that will remain with them throughout their lives.

GATHER 'ROUND Grades 1-3 Sixteen 15-minute lessons

GATHER 'ROUND is a series of story-telling programs designed to familiarize children with traditional classic folk-tales. It will also promote the enjoyment of listening to well-told tales. Enchanting illustrations dramatize and animate the narration in each program.

THE LETTER PEOPLE I Grades 1-3 Thirty 15-minute lessons

The Letter People are 26 delightful puppet characters, each representing a different letter of the alphabet. The Letter Boys are consonants; the Letter Girls are vowels. Each letter Person has a special shape, characteristic, and personality all his/her own. For example, Mr. T. has tall teeth and the sound for Mr. T's letter is the same sound that starts TALL TEETH. Several entertaining devices are presented to help the child decode and understand the structure of words.

THE LETTER PEOPLE II Grades 1-3 Thirty 15-minute lessons

THE LETTER PEOPLE II series continues the exciting, enchanting work of the 26 Letter People and builds on the successful experiences on LETTER PEOPLE, Part I. LETTER PEOPLE II presents reinforcing review lessons, the addition of new sounds for some of the Letter People, syllabication and sentence formation.

THE WORD SHOP Grades 1-3 Thirty 15-minute lessons

THE WORD SHOP is a primary language arts program designed for concept and skill development in listening, speaking, reading, writing, dramatizing and illustrating fiction, non-fiction, poetry and drama. Characteristics and elements of various types of stories, books, plays and poems are presented. Each program presents one concept that is discussed and illustrated by Mr. John Robbins, the host.

READING RAINBOW Grades 1-2 Twenty 30-minute lessons

READING RAINBOW'S goal is both to involve and motivate children to read good books for themselves and to reinforce or extend their reading experiences. The lessons are presented in a magazine format hosted by Le Var Burton. The primary feature of each program is the television adaptation of a children's picture book. Each highlighted book serves as the springboard from which other program elements flow to motivate children to seek and read good literature.

CURSIVE HANDWRITING Grades 2-3 Twenty-one 15-minute lessons

The CURSIVE HANDWRITING lessons place emphasis on demonstration and practice of cursive letters and words. Specific instruction is given to both the left and right handed student as to correct cursive writing technique. The series is available in two versions, compatible with two popular handwriting methods. One version is basically similar to the Zaner-Bloser method of handwriting and the second version is similar to the Palmer method.

MATHEMATICS

MATH FACTORY Grades 1-3 Thirty 15-minute lessons

Most of the important ideas of a beginning modern mathematics program are included in MATH FACTORY, a series of mathematical experiences designed for primary pupils. Colorful puppet characters in a wondrous factory help create better understanding and better attitudes concerning mathematics.

NUMBER TRAIN Grades 1-3 Thirty 15-minute lessons

NUMBER TRAIN, a series for the beginning mathematics learner, is designed to make children more aware of the uses and importance of mathematics in their environment. The lessons help develop positive attitudes and an understanding of mathematical concepts.

MATH PATROL Grades 2-3 Nine 15-minute lessons

MATH PATROL, based on new research, presents ideas in a highly visual manner to help develop comprehension of basic math concepts, to reinforce existing knowledge and to stimulate interest in mathematics. A once static concept takes on new dimensions. Music, animation, black box theatre, humor and many situations that bring the students into the MATH PATROL make the series ideal for classroom use.

MATH CYCLE Grades 2-3 Sixteen 15-minute lessons

MATH CYCLE is a series designed to cover basic concepts and skills in mathematics. Each program either introduces a new topic or extends for mastery topics which were dealt with earlier in the curriculum. The programs have been designed to involve students in responding to questions posed by the television teacher. To this end, the classroom teacher is encouraged to promote student interaction where appropriate.

MUSIC

THE MUSIC BOX   Grades 1-3   Thirteen 15-minute lessons

THE MUSIC BOX leads children on a joyful tour into a magical realm where rhythm, tempo and beat rule supreme, and where mood and imagery are powerful forces. Their guides in this land are host Heather Conkie and a magical music box. With the voice of performer Eliam Zarou, this fantasy gramophone sings, laughs, talks, and illustrates all kinds of music. It magically summons forth instruments for Conkie and introduces talented young guests and the Music Box Band.

STEPPING INTO RHYTHM   Grades 1-3   Thirty 15-minute lessons

STEPPING INTO RHYTHM provides students with the opportunity to participate in basic musical experiences such as singing, responding rhythmically, listening to music, playing rhythm and melody instruments, associating visual symbols with sounds, responding creatively and relating music to other areas of their lives. Each student should develop a positive and confident attitude toward music. Throughout the series, the teacher should enter fully into program activities with students and should encourage all members of the class to sing and participate with the television teacher.

SCIENCE

UP CLOSE AND NATURAL   Grades 1-4   Fifteen 15-minute lessons

Filmed in the natural beauty of "Golden Pond" country, at the 200-acre Squam Lake Science Center in Holderness, New Hampshire, UP CLOSE AND NATURAL is designed to develop in young viewers an awareness and appreciation of the wonders of the natural world around them. Louise McNamara, a popular ITV teacher, explores the Center's fields, lakes and forests, introduces the animals that live there and encourages students to sharpen their skills of observation, description and classification.

SOCIAL STUDIES

LIKE YOU, LIKE ME   Grades K-2   Ten 6-minute lessons

LIKE YOU, LIKE ME is designed to help teachers integrate handicapped children into their classrooms. For use with kindergarten and primary level students, the series consists of ten animated stories about events in the lives of handicapped children. The programs can stimulate discussion about attitudes and feelings and help the teacher set the tone for acceptance and understanding. Both handicapped and non-handicapped boys and girls will benefit from the series.

OTHER FAMILIES, OTHER FRIENDS Grades 1-6 Twenty-nine 30-minute lessons

OTHER FAMILIES, OTHER FRIENDS, unlike field trips which concentrate on things and places, is concerned more with people and how they live. The camera travels to various parts of the world, and pupils have the opportunity to see the life-styles of other children and their families.

BB'S COVER THE GLOBE Grades 1-4 Twelve 15-minute lessons

BB'S COVER THE GLOBE is a social studies series designed to present basic map and globe skills. The lessons center around the adventures of Breezy Barnhill, Super Salesman, and his nine-year old assistant, Bartholomew. Each adventure that Breezy and Bartholomew have is used to teach a specific map or globe skill.

PEOPLE, PLACES AND THINGS Grades 1-3 Fifteen 15-minute lessons

PEOPLE, PLACES AND THINGS is a social studies series which presents facets of community life. The lessons will enrich the viewer's knowledge and interest in family life, the neighborhood and the larger community.

ART

THE ART CHEST Grades 1-3 Thirty 15-minute lessons

THE ART CHEST is an innovative series in arts and crafts for children. Creative expression is emphasized while building the child's confidence and enjoyment in simple art projects. This series provides easy-to-follow techniques in drawing, painting, paper folding, paper cutting and sculpturing; and it introduces many new and creative art projects. Simple art materials are used--including crayons, pencils, chalk, tempera, clay, construction paper, string, yarn and starch, which are easily available at home and at school. During many of the telelessons students can participate in the activities with Mr. Dan Mihuta, on-camera teacher.

CAREER, CONSUMER AND ECONOMIC EDUCATION

PENNYWISE Grades 1-3 Twelve 15-minute lessons

PENNYWISE is a series in economic education and it is recommended for primary students. Very basic economic concepts are presented in the content of each lesson. Designed to make pupils aware of these economic concepts, the lessons are treated in a colorful and creative manner. Using puppets, dramatizations and real life scenarios, the lessons consider basic economic problems and introduce solutions to these problems.

WHEN YOU GROW UP Grades 1-3 Fifteen 10-minute lessons

WHEN YOU GROW UP is a series of career education programs that are designed to help young pupils develop an awareness of a variety of occupations by showing real people at work and explaining what they do.

HEALTH, PHYSICAL EDUCATION AND SAFETY

ALL ABOUT YOU Grades 1-2 Thirty 15-minute lessons

ALL ABOUT YOU uses film clips, models, microscope slides and a lively cast of puppets to introduce first and second graders to the marvel of the human body. The series focuses on physical growth and development and the importance of good health habits. The series emphasizes the functions of the mind and body, helps children understand what a human being is and examines reasons for good health care. Louise McNamara, the television teacher, involves the viewing classroom students in the program, encouraging them to reply to her questions and to participate actively in the lessons.

Utilization Services

Mississippi ETV makes available to the schools in Mississippi a utilization staff dedicated to helping schools make the most effective use of instructional television.

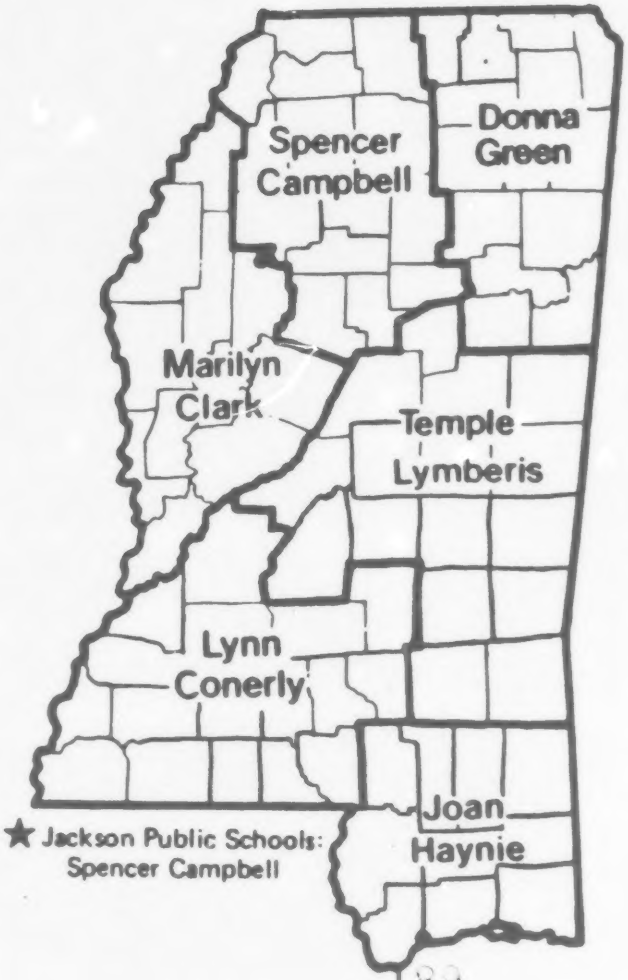
Six Utilization Specialists, each assigned to a particular region of Mississippi (see map), work directly with school administrators, teachers, students and parents. They provide a variety of services.

These services–all free of charge–include:

- ASSISTANCE IN PLANNING a total school schedule to maximize equipment use.
- GENERAL ITV UTILIZATION WORKSHOPS to show program samples, explain the use of support materials and demonstrate the incorporation of ITV into the curriculum.
- SERIES ORIENTATION WORKSHOPS which concentrate on one ITV series or curriculum.
- CLASSROOM DEMONSTRATIONS involving student participation.
- CONSULTATIONS with individuals or small groups.
- DISTRIBUTION AND DELIVERY OF TEACHERS' GUIDES and other support materials.
- ITV ORIENTATION WORKSHOPS for student teachers.
- CRITICAL TELEVISION VIEWING SKILLS WORKSHOPS for teachers, students and parents.
- PRESENTATIONS TO PARENT-TEACHER ORGANIZATIONS

For utilization services write or call your regional Utilization Specialist or contact:

Willie J. Tucker
Coordinator of Utilization and Support Services
Mississippi ETV
P. O. Drawer 1101
Jackson, Mississippi 39205
Telephone: (601) 982-6565



★ Jackson Public Schools: Spencer Campbell

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Physical Education

Physical Education

Introduction

Physical Education does more than present a program for the planned development of physical growth and organic fitness. As the name "physical education" implies, it utilizes the medium of physical activities to contribute to the objectives of general education. The learning domains which benefit from an organized program are cognitive, affective and psycho-motor.

Vocabulary words and concepts to be taught are as follows: creep, crawl, walk, run, gallop, slide, skip, hop, leap, march, roll, throw, catch, kick, bounce, stunts, games, relays, balance, bend, stretch, fall, twist, sway, turn, rhythms, apparatus, stunts, tumbling.

The Kindergarten/Elementary Physical Education program should progress in complexity and difficulty of skill from grade to grade. The program should meet at least twenty minutes daily: the teaching of skills, techniques, attitudes, and understandings should be stressed. This can be accomplished by the teacher using questions: Can you do this? Show me. How many ways can you...? How wide can you...? How small can you...?

It is not the purpose of the rationale to present all skills which are taught but to present skills which we would like for all students to achieve.

Examples of physical education objectives written in measurable terms are:

Given a verbal request: The student can without assistance, leap in a manner characterized by: taking off on one foot and landing on the other.

The kindergarten student will be able to walk in a cross pattern movement.

The kindergarten student will be able to move in a walking pattern while changing directions as directed by the teacher.

General materials needed to address the skills listed below are: ball pumps, steel (cloth) tape (50 ft.), stop watch, first aid kit, phonograph, whistle, bean bags, rubber balls, 8'-12' long jump rope, mats, Indian clubs, hoops, wands or sticks, wooden blocks, records, plastic or cloth mats, carpet, floor or outdoor space, balance beam, overhead ladder, and horizontal bar.

*A sample teacher checklist for evaluation of the student is given below.

The teacher will observe each student's movements in performing the nine locomotor skills. (The check list below will be used to record degree of performance.)

	Excellent	Good	Fair	Poor	Incomplete
Creep					
Crawl					
Walk					
Run					
Gallop					
Slide					
Skip					
Hop					
Leap					

Basic Movement Skills (Locomotor)

The kindergarten student will be able to:
creep using a cross pattern movement.
walk forward and backward using a smooth cross pattern movement.
balance by walking forward on a balance beam moving in a heel to toe fashion.
run using a cross pattern movement.
jump forward using a specified foot.
hop forward using a specified foot.
gallop forward using a specified lead foot.
slide in a specified direction.
skip forward.

Basic Movement Skills (Non-Locomotor)

The kindergarten student will be able to:
balance on either foot.
bend at various body joints.
stretch using large muscle groups.
fall to a mat.
twist body parts.
sway body parts keeping the movement above the axis of support.
turn the body shifting the base of support.

Basic Movement Skills (Manipulative)

The Kindergarten student will be able to:
roll a large ball from a standing and sitting position.
throw a large ball forward using an underhand, sidearm and overhead motion with both hands.
bounce a ball with one hand and then the other.
kick a ball.
catch a rolling and bouncing ball.

Rhythmic Skills

The kindergarten student will be able to:
listen to a beat and respond with finger snaps, clap or foot tap.
listen to a beat and perform even forms of locomotion such as walking, running, jumping and hopping.
listen to a beat and perform uneven forms of locomotion such as galloping, skipping, and sliding.
perform singing games.

Gymnastics (Apparatus, Stunts and Tumbling)

The kindergarten student will be able to:
demonstrate imitative movement, individually, with a partner and in a group.
demonstrate creative locomotor and non-locomotor movements individually, with a partner and in a group.
roll in a sideward and forward direction.
hang and drop from a horizontal bar.
walk and balance on a line.
walk on a low balance beam.
demonstrate methods of mounting and dismounting apparatus.

Physical Education/movement activities should be viewed as a curriculum area that is integrated into unit planning reflected in daily scheduled activities. Perceptual motor development is directly related to later success in reading and writing. The following information was taken from Implementing Kindergarten In Mississippi - An Administrator's Handbook and relates to the outdoor environment. The games and activities also given in this section can be utilized inside as well as outside and should be incorporated into units of study when appropriate.

THE OUTDOOR ENVIRONMENT

The outdoor environment is as important to the learning of the young child as the indoor environment, and an investment in interesting and safe playspaces will provide rich educational returns. One of Mississippi's abundant resources is the natural outdoor environment available even in the most urban areas.

QUESTIONNAIRE FOR PRELIMINARY PLAYGROUND PLANNING

1. What would you like your playground to do for the children?
2. What will be the population of the playground?
    a. Number of children
    b. Size and age of children
    c. Kind of children
3. How large is the available site? What is its terrain? What are its limitations? Are there any natural hazards?
4. Do you want your playground to become an extension of the indoor environment...an available learning center?
5. Which areas of the curriculum could you conduct partially or completely outside?
6. What are some specific needs for your playgrounds?
7. What kinds of play should be provided for... active, quiet, large and small muscle activity, etc.?
8. Are there any special needs for the accommodation of equipment?
9. Will there be water play? sand play?
10. Will wheeled apparatus or vehicles be used?
11. Will a storage building be needed?
12. How will the playground be supervised?
13. Who will be involved in the planning of the playground?
14. What are the financial limitations on your planning?

TYPES OF PLAY ACTIVITY

The playground environment should provide for three types of play: social play, cognitive play, and physical play. Social play is encouraged when the environment suggests rather than dictates the activity; when intimate, small spaces and garden-like divisions encourage children to discover each other; and when play tasks demand cooperative work and give-and-take interaction. Cognitive play is fostered when the playground offers choice, opportunities to make decisions, and many chances for problem-solving. Physical play provides sufficient challenge to involve children and at the same time provides situations in which the child can succeed according to his/her size and skill levels. In practical terms, the following principles of playground design generally hold true:

Physical Planning

Remember that children know their own potential and rarely overextend themselves. If activities and activity apparatus are scaled to diverse sizes and skills, children will be able to meet challenges safely without frustration.

Social Planning

Play often evolves into role-playing and the stretching of the imagination. A log can become a fire engine or a big bus, because it suggests rather than dictates play. If the log needs to be rolled or carried to another position, interaction and cooperation are essential.

Cognitive Planning

Play situations encourage continuous problem-solving and decision making and observation. The child may ask him/herself "Shall I go over or under the bridge?" "Should I walk around or crawl across the plank?" "What can I see from the top of the treehouse?" "What can I see from the bottom?"

GENERAL CONSIDERATIONS FOR PLAYGROUND PLANNING

Because we are concerned, as educators, with these three dimensions of play activity, there are several general considerations we should make in designing the play space.

- Various levels should be included in the equipment design, to provide various vantage points for learning.
- The playground should allow various types of movement on the part of the child.
- Various play events should be linked together in interesting ways. Linking devices include ramps, walkways, stepping stones or columns, overlapping platforms, ladders, balance beams or walls, rope swings, and cable cars.
- The natural terrain of the play area should be utilized as much as possible and enhanced in order to provide variety and interest. If there are no hills, hills can be built. If there is a hill, a slide down the side offers an alternative way to get down.

* Each piece of play equipment or each play "facility" should provide for several play activities. A good play structure is multi-purpose and multi-use.

* The playground should be flexible. New materials added as they are available offer excitement and encourage creativity. Large shipping crates, an old wheelbarrow, planks and tires, a painted barrel, or an old rowboat can challenge children mentally and physically.

* The number-one concern in playground design is SAFETY. The primary reason for playground accidents is that most playgrounds are over-crowded. There should be at least three play events available for every child who is on the playground at the same time. Thirty children should have ninety possibilities for play. Some facilities, such as a sand pit, can comfortably accomodate as many as five children. This provides for five play events. Other hazards to plan against include:

  sharp metal edges
  protruding bolts
  tall narrow slides
  exposed concrete supports
  heavy swinging apparatus
  standing water or mud (provide for drainage by incorporating low areas in playground design...example: dig out a wet area for a sand pit, providing sub-layers of gravel and brick for drainage, or plant a wet area with trees or shrubbery that thrive with much water)
  sharp, pointed corners

SELECTION OF EQUIPMENT

In considering specific equipment to include on the kindergarten/lower elementary playground, the developmental characteristics of pre-school children should be carefully studied. (See preceding pages.)

Slides

*Involve social interaction and participation, large muscle activity, and an on-going flow of movement.
Encourage the child to "trust," as the body's equilibrium will soon be recovered.
*Should offer a choice of ways to get down (exit steps or ladders as well as slick surfaces).
*Should have a wide platform at the top.
*Should be wide enough to let more than one child go down at once.

Swings

*Give a choice of equilibrium base (seat, height, etc.).
*Foster the exhilarating sense of flying.

*Provide for a need to challenge space levels and movement speeds.
*Encourage balance adjustment and muscular tightening and loosening.
*Help foster trust.
*Encourage social interaction and participation.
*Aid pectoral muscle development.

Horizontal ladder

*Develops muscle of forearm.
*Provides for rhythm, eye-hand coordination, and balance.
*Allows for a challenging experience with space levels and ways of manipulating the body across the space below.
*Provides a link between play structures or areas.
*Should be four feet wide so one child can pass another.

Climbing structures

*Basic to gross motor skills and body control.
*Provide hiding, social interaction, problem-solving, and choosing opportunities.
*Can link trees together, creating several directions and dimensions for the climber.

Platforms

*Provide multi-use and multi-level centers to incorporate a variety of equipment such as ramps, slides, jumping-off stations, climbing apparatus, etc.
*Can encourage climbing, sliding, hanging, jumping, swinging, crawling, hiding, balancing, social interaction, participation, and social cooperation.
*Can encourage dramatic and imaginative play as well as physical activity.
*Should provide several exits from each elevation.

Tunnels

*Can be placed above or below the ground.
*Can be made of metal, wood, or a series of tires.
*Should not be so long that a child cannot see light at the end.
*Can be graduated as to the degree of enclosure.

Benches

*Should be clustered and should face one another to maximize opportunities for socialization.
*Can be used as balance boards to link various equipment.

Sand areas

*Provide sensory stimulation.

- *Give background for later ability to conserve.
- *Provide for solitary, parallel, and cooperative play.

- *Offer an opportunity to work with a continuous substance, not provided by any other playground material except water.

Areas under platforms

- *Can become forts, playhouse, grocery stores, or other enclosed spaces.
- *Provide quiet places to work or think.

MATERIALS USED IN DESIGNS

Since wood is one of the best materials for building playground equipment, it is the basic material used in the designs provided. Wood has natural warmth and resiliency, it is aesthetically pleasing, and is the best material to use if playground construction is to be done by amateurs. The lumber should be carefully inspected for quality before it is purchased. Other points to consider include:

1. Store lumber properly during construction, keeping it covered and off the ground.
2. Sand all wood surfaces well before and during building.
3. Cover all wood with a safe preservation and sealer, especially exposed surfaces and any wood below ground level.
4. Routine safety checks should be performed. Maintenance for wood constructions is no more difficult than for other materials, but occasional repair work and some replacement of weak boards must be done.

Generally, unless otherwise indicated in the plans, the wood used in the construction of the playground equipment consists of cedar or pine posts used as supporting members of tree houses and large structural type equipment, number two grade pine framing, and exterior marine plywood. Where rigidity is needed, posts should be set in concrete. Posts and the horizontal climbing trees should be stripped of bark. Wood edges and splintered areas should be rounded and sanded. All wood should be treated with a non-toxic wood preservative.

To add color to the playground wood stain can be used and requires little maintenance. A few of the smaller pieces such as boxes can be painted, adding variety and brightness.

Galvanized metal should be used for the slides, horizontal bars, fastenings and hardware. Metal fastenings should be checked periodically for rust spots and weakening of linkage in the chains. When rope fastenings are used, allow for stretching. Tighten when necessary. Remember to place sand at the bottom of slides and in other locations where children are constantly landing or falling.

LANDSCAPING

Proper landscaping adds to the beauty of an area. In the large playground the planting of deciduous trees is recommended, to eventually provide shade and structural elements if any additional equipment is desired. The particular element will add a natural flavor to the environment.

The play area should be treated as a small play park, with low slow-growing plants around paths and grassy areas, and along fences. A few trees should be planted to be used as suggested above. A rock garden also provides a science observation and participation area. Large potted plants may be set in out-of-the-way places on the hard surface areas.

CHECKLIST FOR PLAYGROUND EVALUATION

After designing the playground it is wise to build a model before beginning construction. This need not be a scaled model, but can even be constructed of old boxes, cans, sticks, and other junk materials. The three-dimensional model will give more of an idea of any problems that might be encountered in a real playground than can a drawing. After completing the model, use the following checklist to evaluate the plan.

YES	NO	
________	________	Are there any areas where traffic is likely to be a hazard?
________	________	Is a child coming down from one piece of equipment automatically drawn to another?
________	________	Is an area provided for quiet dramatic play away from active play areas?
________	________	Is the number of play events provided three times the number of children who will be using the playspace at one time?
________	________	Is there a storage space for temporary equipment?
________	________	Does each piece of equipment have more than one purpose and more than one use?
________	________	Does the equipment lead children to several different spatial levels?
________	________	Is provision made for creative activity through manipulative materials, construction materials, sand and water play, etc.?
________	________	Is the playground aesthetically appealing and does it provide various colors and textures, natural garden or growing areas, pathways, and other landscaping details?
________	________	Is provision made for social, cognitive, and physical play?
________	________	Is the play area as safe as possible, and is it completely fenced to ensure safety from external hazards?
________	________	Is the area likely to be stimulating and exciting for children?

PERCEPTUAL MOTOR ACTIVITIES

Equipment:

1. mat or carpet area
2. handprint
3. steps
4. balance beam 2" x 4" 10' long
5. a yardstick
6. two chairs
7. three targets (circle 2" in diameter)
8. footprints
9. 8" playground ball
10. six beanbags
11. box or wastebaskets 12" diameter
12. 2' x 2' target
13. marsben ball (ball on a string)
14. jump hop pattern
15. cardboard box 16"-20" in diameter
16. lummi sticks
17. rhythm instruments

DESCRIPTION OF ACTIVITIES

Log Roll

Ask child to lie on floor on his stomach and:

a. Roll from his stomach to his back.
b. Roll from his back to his stomach.

Crawl

Ask child to move across the room with his stomach contacting the floor, pulling forward with his arms and pushing with his feet, "Commando-style".

Creep

Ask the child to creep on his hands and knees, placing his hands on the handprints made from construction paper and taped to the floor. Check for correct cross-extension pattern.

Identify Body Parts

Children need to discover how their bodies move, they have to be able to differentiate one body part from another and they should distinguish between right and left when they enter first grade. If a child develops a good image of his body, he will have a base upon which to build the perceptual skills which will be needed in future classroom activiites.

Body awareness begins with the identification of body parts. Children must be able not only to identify each body part but have kinesthetic understanding of how each part functions, by itself and in relation to other body parts.

1. Upper body identification -
   Touch or move head, eyes, mouth, nose, hair, neck, arms, face, teeth, shoulders, back, hands, fingers, wrists, etc.

2. Lower body identification -
   Touch or move stomach, legs, knees, feet, toes, ankles, hips, backside, etc.
3. Combination of body levels -
   Touch knee to nose, hand to foot, wrist to ankle, head to knee, elbow to stomach, etc.

"Angels in the Snow"
Have child lie on the floor on his back, feet together, arms at his sides. Ask him to slide his arms "up" along the floor, keeping his arms straight until his elbows are touching his ears and hands touch each other; then, keeping his knees straight, ask him to move his legs "out" as far as possible. Now, tell him to watch your eyes, to listen carefully, and to do just what you ask:

a. Move both arms up... and back.
b. Move both legs out...and back.
c. Move your right arm up.
d. Move your left arm up.
e. Move your right leg out.
f. Move your left leg out.
g. Move both arms and legs at the same time.
h. Move your right arm and right leg.
i. Move your left arm and left leg.
j. Move your right arm and left leg.
k. Move your left arm and right leg.

(The above is a suggested monologue; use your own terminology.)

Check that the child's movements are smooth, decisive, and reach maximum extension. There should be no jerkiness, overflow into other limbs, or false starts. He should keep limbs in contact with floor and know when they are not. Note if child is able to maintain eye contact with you for periods of time long enough to test his abilities. (The main pupose of this task is to determine child's ability to control his movements, not necessarily his awareness of right and left; if he does not know right from left, point to the proper limb(s).

Mirror Images
Ask child to stand facing you, several feet away, and to do whatever you do. Move through each of the following patterns in order. Child's movements should be prompt, definite, and correct. Acceptable performance is moving his right arm when you move your left while facing each other. Check that he is consistent in either reversing or paralleling your movements.

Balance Beam
Lay beam on its broad side on the floor. Instruct child to watch his feet if necessary while moving on the beam, but to try to keep his eyes on the visual target (v.t.) ahead of him. (Place v.t. in front of him, in line with the beam, at eye level.) Ask child to:

a. Walk forward on beam, heel to toe, toes pointed straight ahead.
b. Move sideways on beam crossing right foot over left.
c. Move sideways on beam crossing left foot behind right.
d. Walk backward on beam, heel to toe, toes pointed straight ahead.

If child steps off beam more than once during each exercise, if he had difficulty maintaining balance, if he uses his arms too symmetrically or one side of body more consistently than the other, if he is unable to maintain his vision on the v.t. - his performance is inadequate.

Stair Steps

Ask child to:

a. Walk upsteps, both feet on each step, without assistance.
b. Walk down steps, both feet on each step, without assistance.
c. Walk up steps, alternating feet, without assistance.
d. Walk down steps, alternating feet, without assistance.

Walk over, under, between

Instruct child to stand. Ask him to:

a. Step over a yardstick held at his knee height.
b. Duck under a yardstick held two inches lower than his shoulders.
c. Squeeze through an opening between two chairs (placed close enough together that he must turn to pass through) without touching them.

Observe whether he over- or underestimates locations of yardsticks and chairs.

Footsteps

Place a patch of red contact paper on child's right foot; yellow on his left. Ask him to step on the red footprints with his red foot; on the yellow footprints with his yellow foot. (If necessary, demonstrate the first few steps. Do not demonstrate the cross-over steps.) Observe if he misses any of the steps, steps off, or alters the foot placement to solve the task.

Balance, eyes closed

Ask child to stand facing you. Ask him to:

a. Place his arms by his sides, close his eyes and stand for ten seconds.
b. Extend his arms for balance, close his eyes, and stand on preferred foot for five seconds.

RHYTHMIC MOVEMENT ACTIVITIES

Use The Body As An Instrument

Music:	Lively music with lots of action. Music which is designed for rhythmic movement.
Activity:	Follow the leader method. Leader begins a motion and the children follow.
Suggested Motions:	Hand clapping, foot tapping, finger snapping, arm crossing, hand shaking, toe tapping, etc.
Variation:	Combine any of the suggested motions or begin with a combination of two motions and change motions at the end of

a phrase. Work up to a series of changes depending on the ability of the group.

Use Rhythm Instruments

Music:	None needed for this activity.
Activity:	Use sticks, drums, triangles, shakers, sand blocks, wood blocks, or other rhythm instruments; however, sticks or drums are recommended. Follow the leader method of activity with the leader creating the activity and the children following.
Suggested Activities:	Tap out a steady beat; all beats should be equal; increase or decrease the volume (loud and soft); accent a beat and create a rhythmic pattern.
Variations:	When children have successfully experienced the beginning activities, introduce the following movements: *Tap on floor then above the head. *Chant up - down the movement of the instrument. *Chant loud - soft with the volume of the instrument. *Stress use of individual hands; two beats left hand, two beats right. *Increase number of beats played with each hand.

Rhythm Stick Progression Activity

Music:	Rhythm with even beats.
Equipment:	Sticks of one color for each child and an assortment of different colors, one for each child.
Formation:	Scattered, children sitting cross legged. Each child has one color (blue) in right hand and a stick of a different color in the left.
Activity:	Begin by tapping to music with all sticks, identify the assorted colors by calling individual colors to keep rhythm. Call colors for individual phrases.
Variation:	Call right and left hand to keep rhythm.

Roll/Catch Ball, Sitting

Have child sit on floor, straddle legged. Roll ball to him between his legs. Ask him to catch it and roll it back to you.

Throw Beanbag (BB) Into Containers

Ask child to stand facing you, six feet away. (When tossing beanbags, be very careful not to hit him in the face.) Ask him to:

a. catch with two hands.
b. catch with right hand.
c. catch with left hand.
d. alternate hands - throw with one hand and catch with the other.
e. toss beanbag back and forth across body from hand to hand.
f. after success with simple toss, try eye tracking beanbag without moving head.
g. try keeping beanbag in "flat" position, and pass back and forth using small, quick exchanges.
h. using a wider distance, toss beanbag across body with rhythmical swing from hand to hand.
i. throw beanbag upward above head and jump to catch it at the highest possible point.
j. Can you clap two times and catch it?
k. How many times can you clap your hand before catching the beanbags?
l. jump and catch beanbag.
m. throw the beanbag upward and forward, then run forward and catch it.
n. place the beanbag on your foot (or instep), then swing the beanbag upward from your foot and catch it. (Try it on each foot.)
o. flip beanbag 1/2 turn and catch it.

Kick Stationary Ball

Place ball on ground in front of child. Ask him to:
a. kick it as far as he can with his right foot.
b. kick it as far as he can with his left foot.

Bounce and Catch Ball

Place ball in child's hands. Ask him to:
a. bounce and catch ball with both hands.
b. dribble ball with both hands.
c. dribble ball with right hand.
d. dribble ball with left hand.
e. dribble ball while running.

Catch/Return Bounced Ball

Ask child to stand facing you about ten feet away. Ask him to:
a. catch ball which you bounce to him (on first bounce).
b. bounce ball back to you so that you can catch it on first bounce.

Roll Ball Into Box

Ask child to roll ball into box or carton (16-20 inches in diameter) from a distance of ten feet.

Bounce Ball On Target

Ask child to stand ten feet away from 2' x 2' target. Instruct him to bounce ball into target.

Kick Rolled Ball

Ask child to stand facing you about 10-12 feet away. Roll ball toward his feet. Ask him to kick it as far as possible.

SUGGESTIONS FOR THE TEACHER RELATING TO CREATIVE MOVEMENT ACTIVITIES

1. Do not demonstrate. Let each child find his own way of moving to answer the questions. Be sure the children understand that questions call for movement, not words.
2. Do not be afraid to repeat activities. Children love to do again the things they know well.
3. Use rhythm instruments very sparingly at first. If an attempt at uniform rhythm is made too early, much of the variety, spontaneity, and inventiveness of children's responses will be lost.
4. Encourage original responses. Encourage the clumsy and timid child.
5. There can be no standard of excellence in exploring movement. Children should be encouraged to use their own ideas and efforts.
6. Basic to the success of such a program is the willingness and eagerness of the teacher to experiment with movement.

Activity: Creative Movement

Title: Space -- Idea of Space

Can you touch the top of it? The front of it? Can you touch the back of it without moving your feet? How far out to the sides? Let's see how far it goes away from your feet? To the floor? Above your head?

See how far out you can stretch -- both arms -- both feet.

Squeeze in until you are very small -- stretch out again until you are very wide.

How high can your knees go? How long? How far apart? How close together?

Run in place, then let both knees go high at once. (What did you do?)

How do people walk going to a football game? How do they leave if their team lost? How if they won?

Can you write a number in the air with your arm? Can you make the same number on the floor by walking?

How would you move if your feet were roots planted in the ground and you were being blown by a strong wind?

You are pulling something very heavy that is stuck to the floor. Can you pull it up?

Some part of your body is attached to the floor. How would you turn around it?

Can you change the shape of your body while you are turning?

Take a tiny movement and make it grow until it make your whole body moves -- then let it take the same path back out. When you are standing still, we will know that you are finished.

Some Suggested Problems to Encourage Movement Experimentation

1. See if you can make one part of your body higher than another part while on all fours. (Hands and feet)
2. Try to make as crooked a shape as you can. Now walk like a crooked man.
3. Pick out a spot and walk to it using as few steps as possible. Now turn and walk back using as many steps as you possibly can.
4. See how slowly you can walk to you seat, keeping your feet moving all of the time.
5. Point to the spot where you would like to go. Now go in as many different directions as you can before you get there without touching anything or anyone.
6. Try making yourself tall, then small, wide, then narrow. Try making yourself both wide and tall; round and tall; round and small.
7. Your feet are fastened to the floor. Now reach for something circling around you.
8. Lie on your side or back. Now move as if you were tied up and were trying to get to another spot; now try to get loose.
9. Walk with stiff knees and stiff arms. Now walk with rag-doll legs and rag-doll arms; stiff knees and rag-doll arms; rag-doll arms and stiff legs.

SINGING GAMES AND FOLK DANCES

EENSEY-WEENSEY SPIDER (Song-activity) With pointer and middle finger, children can "crawl" a spider up their arms. With both hands they can motion "the rain came down and washed the spider out." Then they can make a big sun with both arms overhead and walk the spider down again.

> The eensey, weensey spider went up the water spout.
> Down came the rain and washed the spider out.
> Out came the sun and dried up all the rain
> and the eeensey, weeeeeensey spider went up the spout again.

WHERE IS THUMBKIN? (Song-activity) This is a finger exercise where the children bring the designated thumb or finger out from behind their backs -- left one first and then the right -- when song says "Here I am, here I am." The fingers bow to each other on the words "How are you this morning?" "Very well, I thank you." And the hands disappear one at a time behind the back on the words "Run and hide." The phrase "the whole family" refers to all fingers.

> Where is Thumbkin?
> Where is Thumbkin? (pointer, middle, ring-finger, pinky,
>   where's the whole family)
> Here I am. Here I am.
> How are you this morning,
> Very well I thank you,
> Run and Hide. Run and Hide.

LOOBY LOO

Here we dance, looby, looby, looby.
Here we dance, looby, looby, light.
Here we dance, looby, looby. looby, loo,
Every Saturday night.

Put your right hand in.
Put your right hand out.
Give your right hand a shake, shake, shake,
Hinkumbooby round-about.

Here we dance, looby, looby, looby, etc.

Put your left hand in, etc.

Here we dance, looby, looby, looby, etc.

Put your two hands in, etc.
Put your right foot in, etc.
Put your left foot in, etc.
Put your two feet in, etc.
Put your right elbow in, etc.
Put your left elbow in, etc.
Put your two elbows in, etc.
Put your right ear in, etc.
Put your left ear in, etc.

The players stand in a ring, clasping hands. For the first two lines of the chorus --

Here we dance, looby, looby, looby
Here we dance, looby, looby, light

the players sway from one foot to the other, throwing the free foot across the other in sort of a balance movement in rhythm to the music. On the last two lines of this verse --

Here we dance, looby, looby, looby, loo,
Every Saturday night,

the circle gallops halfway around to the left for the first line, and reverses the action, returning to place on the last line.

For the alternate verses which describe action the movements are suited to the words; for instance, when the left hand is called for, the players lean far forward and stretch the left hand into the ring while singing the first line, turn around, and stretch the left hand outward for the second line, shake the hand hard on the third line, and on the last line jump or spin completely around.

This is a very ancient game, supposed to have originated in a choral dance, probably in celebration of the rites of some deity, in which animal postures were assumed or animal rites were an object. Later, it was an old court dance, stately and decorous as the minuet.

DID YOU EVER SEE A LASSIE?

This is a game for very little children, and with a little suggestion as to the exercises or movements to be illustrated by the "lassie," may be the source of some very good exercise as well as a pleasing game.

All of the players but one form a circle, clasping hands. They circle around, singing the first two lines of the verse. While they are doing this, the odd player stands in the center and illustrates some movement which he chooses for the others to imitate. During the last two lines of the verse the players stand in place, drop hands, and imitate the movements of the center player, which he continues in unison with them.

Did you ever see a lassie, a lassie, a lassie,
Did you ever see a lassie do this way and that?
Do this way and that way, and this way and that way;
Did you ever see a lassie do this way and that?

When a boy is in the center, the word "lassie" should be changed to "laddie."

The player may imitate any activity, such as mowing grass, raking hay, prancing like a horse, or turning a hand organ; may use dancing steps or movements such as bowing, curtsying, skipping, whirling in dance steps with the hands over the head, etc.; or may take any gymnastic movements, such as hopping, jumping, and arm, head, trunk, or leg exercises, etc.

LET'S GO ON A LION HUNT
(A Hand Rhythm Activity)

This is a hand rhythm activity with leader and group response. Children from the age of three to the age of eight will enjoy this activity. Students can easily participate in a classroom setting. They need only turn in their desks or chairs so they may slap their knees during the activity. Teachers often use the Lion Hunt to develop their children's listening skills and also to note how well children really understand what someone has said to them.

Instructions to the group: "Repeat everything I say and do. Be my echo and a copy cat as we play this game." The hand rhythm sets a 4/4 tempo of dialogue.

Leader	Group
Let's go on a lion hunt.	Let's go on a lion hunt.
O.K.?	O.K.
Let's go.	Let's go.

Hand rhythm: Slap knees with one hand and then the other to pantomime high steps.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a river.
Can't go around it.
Can't go under it.
Let's swim through it.
Let's go.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a river.
Can't go around it.
Can't go under it.
Let's swim through it.
Let's go.

Hand rhythm: Make swimming strokes with hands.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a bridge.
Can't go around it.
Can't go under it.
Let's cross it.
O.K.
Let's go.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a bridge.
Can't go around it.
Can't go under it.
Let's cross it.
O.K.
Let's go.

Hand rhythm: Pantomime is to beat one fist and then the other on the chest.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a field.
Can't go around it.
Can't go under it.
Let's go through it.
O.K.
Let's go.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a field.
Can't go around it.
Can't go under it.
Let's go through it.
O.K.
Let's go.

Hand rhythm: Brush hands together in hand rhythm tempo.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a puddle.
Can't go around it.
Can't go under it.
Let's jump it.
O.K.
Let's go.

Walking through the jungle,
Looking for a lion.
Oh look!
There's a puddle.
Can't go around it.
Can't go under it.
Let's jump it.
O.K.
Let's go.

Back up.
Run.
Jump.

Back up.
Run.
Jump

Hand rhythm: Run-Hand rhythm on legs speeds up to a fast tempo. Jump-Raise both hands in a high arch then come down with both hands.

Walking through the jungle,	Walking through the jungle,
Looking for a lion.	Looking for a lion.
Oh look!	Oh look!
There's a cave.	There's a cave.
Can't go around it.	Can't go around it.
Can't go under it.	Can't go under it.
Let's go in.	Let's go in.
O.K.	O.K.
Let's go.	Let's go.
Be brave.	Be brave.
Let's go.	Let's go.

Slow down hand movement and lower voice. Whisper and players should whisper answer back.

It's dark in here.	It's dark in here
I can't see anything.	I can't see anything
Oops!	Oops!
What's this?	What's this?

It's big! - Move hand as if you were moving your hand across the lion's back.
It has lots of fur. - Players rub their own hand in their hair.
It has big eyes. - Move hand in small circles in front of you.
It has sharp teeth. - Move hand as if you were feeling of a sharp tooth.
It has a long tail. - Trace a lion's tail on the floor.
It has a big nose. - Act as if you can feel the lion's nose.

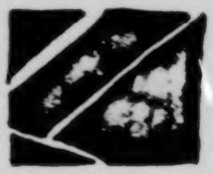
SHOUT, "It's a lion!" Rapid hand rhythm.
With rapid hand movements reverse and go back through each obstacle crossed during the trip. Example: Jump the puddle, run through the field, run, across the bridge, run, swim the river, run.

Wheww!	Wheww!
Let's don't go on a lion hunt!	Let's don't go on a lion hunt!
Not today,	Not today,
Maybe tomorrow,	Maybe tomorrow,
But not today.	But not today.
We're tired.	We're tired.
Whewww!	Whewww!

Hand rhythm: Tempo slows and stops
This is good activity for a break from studying or as a small part of a classroom physical education lesson. Mastering the rhythm and skills required for this activity are well worth the time.

Rosalie Bryant and Eloise McLean Oliver, Fun and Fitness Through Elementary Physical Education (West Nyack, N. Y., 10994, Parker Publishing Co., 1967) p. 266.

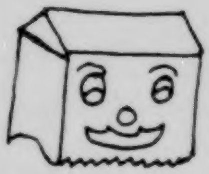
Wooden-Square Puzzle
Cut a square board or plyboard into four pieces. Can the students reconstruct the square?



Clothespin Drop
Take a jar or bottle having an opening 2" in diameter and see who can drop the most clothespins into the jar from a distance of one yard above the jar.

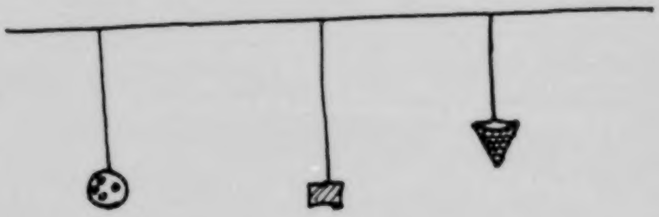
Sponge Balls
Rounded pieces of sponge can be utilized for light harmless balls for games within the classroom.

Paper-sack faces
Students will enjoy making and wearing paper-sack faces. Paper sacks, scissors, crayons, or water colors are the essentials. Include glue if a creative student wishes to make hair.

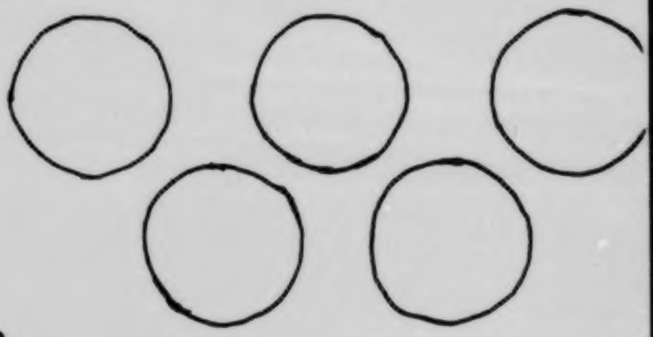


Stocking Ball
Take a pair of old panty hose and cut in half. Roll up an old cotton sock and tape it with masking tape. Put the sock ball in the toe of each panty hose. How many ways can the students twirl the stocking around themselves? Can they transfer the stocking from one person to another while still twirling it?

Paddle Practice
Secure a rope approximately chin high to the students. Using 30" pieces of parachute cord, tie whiffle balls, badminton birdies, etc., to the rope at three-yard intervals. Practice hitting the balls with stocking paddles, ping pong paddles, etc. (Avoid hitting the balls so hard that they swing in a 360 degree circle.)



Hoop Patterns
Place hoops side-by-side on the floor to make patterns for various activities. Can the students dribble a ball through the pattern without hitting the hoops? Can the hoop pattern be used for hopscotch?



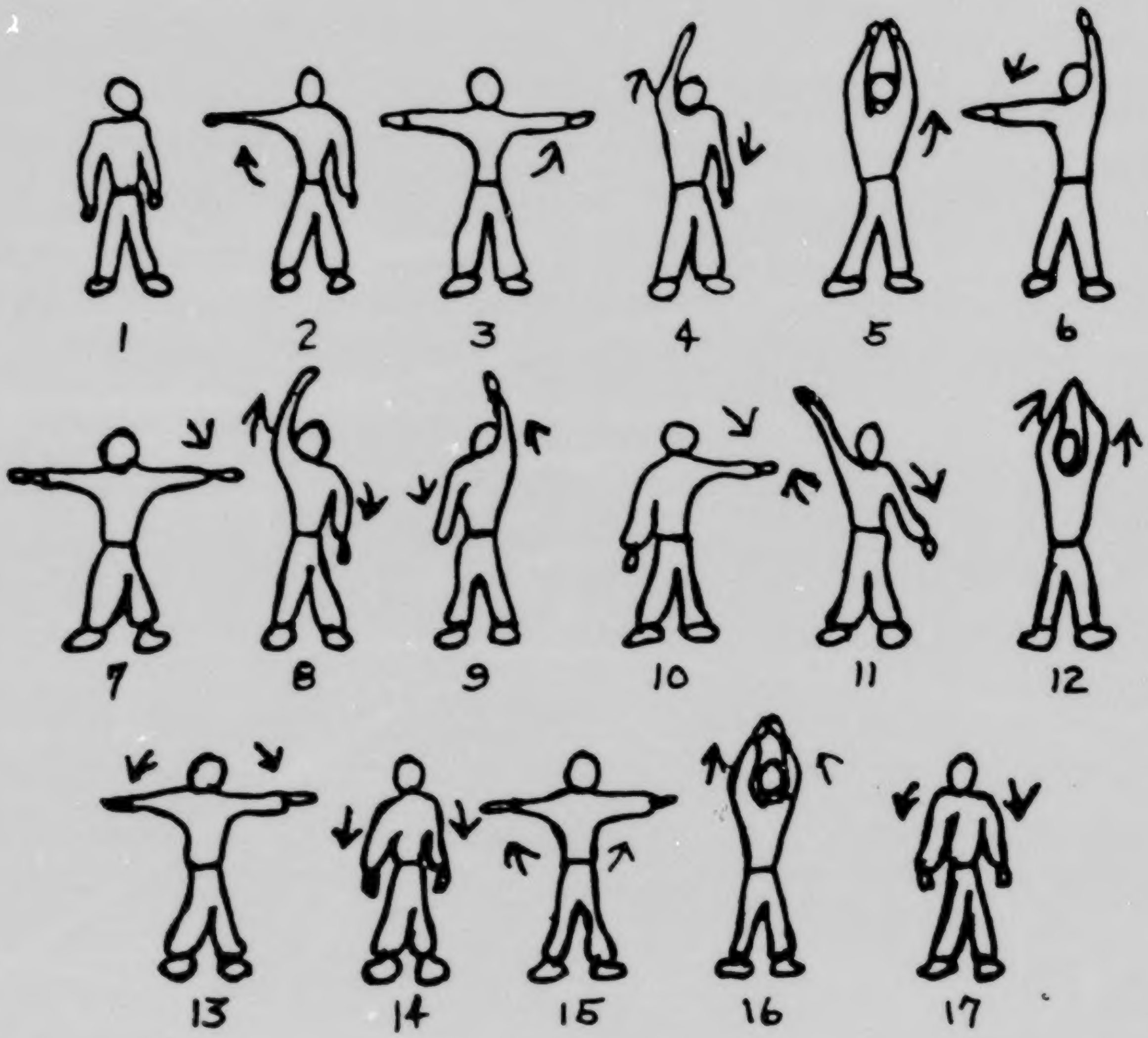
Egg Carton Roulette

Take a commercial egg carton and number all of the indentions, mixing large and small numbers. Place the egg carton target on a table. Toss a ping pong ball and allow it to bounce one time before falling on the target. The score will be the number under the ball.

Bowling Pins

Many times old bowling pins will be donated to schools by local bowling alleys; but if not, milk cartons, plastic bottles, or clorox bottles may be used. Sometimes it is necessary to weight such containers with an inch or so of sand to increase their stability.

Mirror Images
Ask child to stand facing you, several feet away, and to do whatever you do. Move through each of the following patterns in order. Child's movements should be prompt, definite, and correct. Acceptable performance is moving his right arm when you move your left while facing each other. Check that he is consistent in either reversing or paralleling your movements.



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Math

MATHEMATICS ACTIVITIES

THINKING SKILLS AND VOCABULARY

- Sorting Buttons
- Sorting
- What's the Sound?
- Category Collections
- Magnet Fishing
- Holiday Sorting
- String Story
- Locations
- Little Mouse
- Near 'N' Far
- Act It Out
- Positions 'Round the Room
- Small Group Position Play
- Concept Cards
- Jar Lids
- Spooky Sequence
- Help the Puppy Make Up His Mind

ONE-TO-ONE CORRESPONDENCE

- Correspondence Games
- People, Hats, Balloons, and Houses
- Punchy Pairs
- Snack Time One-To-One Correspondence
- Cutouts and Correspondence
- More Correspondence Games

COUNTING, COMPARING, AND ORDERING

- Classroom Counting
- Push A Bean
- Teddy Bear
- A Counting Walk
- It's In The Bag
- Fold And Count
- Magnet Comparison
- Pennies
- Count and Record
- The Whale Story
- Listen and Count

NUMBERS AND NUMERALS

- Feed the Puppy
- Magnet Cars
- Number Partners
- Hallobeans
- Old Woman Who Lived In A Shoe
- Pinnochinose
- Mr. Freckles
- Teeny Tiny Bubbles

Ladybug Math
Pipe Cleaner Snakes
Playdough Numerals
Writing Numerals
Stick-Up Numerals
Punchy Numerals
Smurfy Dress-Up
Turkey Tails
"Show Me"
Toss and Count
Go-Together
Number Walk I
Number Walk II
Way Down Yonder In the Paw Paw Patch
Mary Had A Little Number
The Muffin Man
For He's A Jolly Good Fellow
Number-Numeral Board Games
Outdoor Fun With Numbers And Numerals
Line Up Game

GEOMETRY AND MEASUREMENT

Geometric Designs
Monster Shapes
Geometry Flannel Boards
Geometry Stories
Geometry Scavenger Hunt I
Geometry Scavenger Hunt II
Step-On Shapes
Geoboards
Three Dimensional Collage
Linear Measuring By The Foot (Print)
Linear Measuring By The Foot (Ruler)
Longer And Shorter Hunt
Weight Sequencing
Balancing Act
What's The Temperature?
Balancing Act
Measuring Tool Collage
A "Me" Book

BEGINNING OPERATIONS WITH NUMBERS

Bead Addition
Blocks "Grab Bag"
Ice Cream Cones
The Hanger Game
Animal Comparisons
Take-Away Task Cards
Hidden Pennies
Count Down
Pop and Unpop
Rings 'N Fingers
Bears That Love Hamburgers
Arrays

Dividing
Clothespin Clipons
Sharing Games
Divide and Glue
"Split Up" The Marbles

INTERGRATED ACTIVITIES
Graphing Fun
Weather Watch
Introducing One-Half
Number, Please
The Candy Store
Prices and Coin
Playing Store
Tick and Tock
Five Minutes
Time Puzzles: On The Hour
Bertha Bird
Soap Bubbles
Peanut Butter Balls
Numeral Pancakes
Play Dough
Fruit Salute
Sharing Soup
Popcorn
Machines Help People
Sharing Computer Toys
A Classroom Guest
Programming A Picture
A Name Game
Using Computer Programs

MATHEMATICS

Work with mathematics is an important part of the total development of kindergarten children. Mathematics is useful and pertinent in many situations. It lets children explore ideas related to comparing objects and sets of objects, telling how many objects are involved, dealing with geometric shapes, and working with patterns. High quality experiences in kindergarten can extend and deepen children's understandings of mathematics thus laying a firm foundation for their future work in math.

Children want to communicate and mathematics is an essential part of conveying ideas about quantity, size, shape, time, and relationships of objects. Children should be led to see a need for using specific mathematics vocabulary as they handle materials and describe situations. Without words such as, "more", "three", "over", or "square", language is imprecise; both speakers and listeners are confused. Vocabulary development must be based on work with concrete materials and real experiences.

Young children enter the world of mathematics eagerly. They want to know more about almost everything around them. They have seldom internalized the idea that math is hard or complicated. Adults can do much to sustain children's enthusiasm for math by providing intriguing materials to work with and by presenting interesting and challenging situations in which to use math.

CONCEPT LEARNINGS

These kindergarten mathematics activities include teaching-learning ideas for seven important areas:

Thinking Skills and Vocabulary
One-to-One Correspondence
Counting, Comparing, and Ordering
Numbers and Numerals
Geometry and Measurement
Beginning Operations with Numbers
Integrated Activities

A brief description of each area and its importance follows.

In the mathematics activities presented, Thinking Skills includes working with positions, patterning, and making sets. These thinking skills are important not only in math, but relate to every area of the curriculum. Vocabulary development complements thinking skills and enables children to understand others as well as to express themselves clearly and precisely. Work with positions helps children to understand and follow directions and to describe the locations of objects. Positional words such as under, over, in, on, out, right, and left are used everyday in a kindergartener's world. Learning to classify objects according to their characteristics or attributes is another important skill. Making sets can develop children's logical thinking and language skill. Making sets also leads children to carefully examine and describe the attributes of objects. Through patterning children learn to arrange objects in predictable ways so the objects repeat over and over. Children can extend, create, reproduce, and describe patterns. Study of patterns leads to understanding and appreciation of patterns of numbers and patterns found in nature. Work with patterns helps to promote readiness for later work with place value.

One-to-One Correspondence involves the matching of members of two sets to see if each member has a "partner". For example, children might be given some plastic cups and some saucers. If each cup can be placed on a saucer, then the cups and saucers are in one-to-one correspondence. Working with one-to-one correspondence is important because it lets children solve problems. Looking at abstract numbers, children may not know whether 5 is greater than 6 or not, but given 5 pennies and 6 purses, the child can put a penny into each of the purses and have one purse left; the child is now sure that 6 is greater than 5. Using one-to-one correspondence lets children verify whether there are enough cookies for each child to have one, or enough hats for each doll in the housekeeping center.

Counting activities develop skills with counting in sequence. Children must learn the order of numbers; they must also learn to count rationally and meaningfully as they associate just one number with one object. Rote counting, merely saying number names in order, usually precedes rational counting but is not a substitute for sensible or rational counting. In the beginning stages of counting, children should touch each object as it is counted or should move objects away from other items in a set as they are counted. Counting leads to comparison and determining whether sets of objects are equal (Equal sets can be put in one-to-one correspondence.) or whether one set has more members than another. Children need many experiences with counting to develop skills, and to build appreciation for the usefulness of the counting process. As children learn to count, they also learn to put sets of objects in order from those with the fewest members to those with the most members. Children can also order objects of different heights, lengths, weights, and other qualities.

Without numbers and numerals, we could not express our ages or clothing sizes. We could not discuss the time that we eat lunch or tell about the scores of a ball game. Telephone numbers and addresses would have to be handled differently than they are now.

Indeed, numbers are important! Children learn to work with and to understand numbers by manipulating concrete materials and working with real objects. They learn that a number name such as five can be applied to a group of children, a bunch of apples, a pile of coins, or a stack of blocks. Children learn that number words are important because they tell "how many". Young children must learn to associate numbers (quantities) and the numerals (symbols) that represent the numbers. Working with numbers goes right along with making sets and counting. Reading and writing numerals should follow children's development of rational counting.

Geometry and measurement activities for young children let them experience situations with different sizes and shapes. Children work with circles, squares, triangles, and rectangles as well as flat and solid objects. Children learn to name shapes and to recognize them in everyday life, thus increasing their awareness of the wonder and beauty of geometry in nature and in objects made by people. Kindergarten children are not developmentally ready for formal experiences with measurements, but enjoy beginning to measure things and record data. Kindergartener's premeasurement concepts are built and strengthened as they work with judging the longer and shorter or heavier and lighter of objects. Children also need experiences with objects of equal lengths, volumes, and weights. In this curriculum guide when both metric and "standard" measurements are used children will use both in more formal measurement experiences in the primary grades.

As they begin operations with numbers children combine and separate sets of objects to represent addition and subtraction situations. Such operations are natural to young children; they should not be formally taught but rather presented in concrete situations that involve handling real objects, counting, and conversing about the quantities involved. Young children can also explore the important concepts of multiplication and division as they combine equal sets of objects, make arrays, and pass out objects to make equal sets. Once kindergarten children can write numerals, many will be ready to write or help write number sentences that tell about mathematical operations with objects.

In this resource book activities that combine the use of many math skills and concepts are called integrated activities. For example, when children make a recipe, they measure, perform steps in a sequence, count ingredients, and read numerals. They may also deal with fractions. Typically, they "add" ingredients together and end up with a finished product. When children play store, they deal with boxes and packages of different sizes, weights, volumes, and shapes. They may work with one-to-one correspondence, matching products and prices. They practice communication skills as they converse, work with names of products and perhaps write "receipts". Indeed the kindergarten classroom offers many opportunities for integrating many math skills and concepts in learning experiences!

SELECTED VOCABULARY

Mathematics vocabulary has been divided into six general areas. The lists below include words that should be used by teachers as well as by the children. Most children will understand the words before they can use them. That is, most children can point out a square before they can name a shape of a square or show the teacher a dime before they can name the coin with its proper name. Most children should be exposed to the following groups of words.

Comparing Words

alike
different
more
less
fewer
equal
the same as
big
small
long
wide
some
none
narrow
short

Postional Words

over
under
above
below
to the right of
to the left of
in the middle
inside
on
off
top
bottom
front
back
forward
backward
high
low
first
last
near
around
outside

Number Words

Cardinal sense
Ordinal 1st - 10th (Most children master all)
Work with number names (Most children master all)

Measurement Words

measure
weigh
ruler
heavy
light
time
o'clock
clock
scales
empty
full
tall
short
hour hand
minute hand
cup
spoon
foot
inch
pound
gram
meter
centimeter
milliliter

Geometry Words

square
circle
rectangle
triangle
geoboard
flat
solid
curved
straight

Some children work with: oval, semicircle, hexagon, octagon

Other Math Words

set
member
telephone number
Coin words:
penny
dime
nickel
quarter
half dollar
dollar

GENERAL MATERIALS LIST

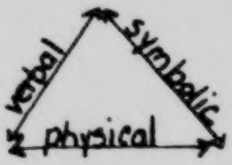
Counters such as unifix cubes, beads, jar lids with smooth edges, tongue depressors, straws, buttons, washers, or sections of egg cartons
Cuisenaire rods
Small plastic animals and people for counting and grouping
Large and small blocks
Geoboards
Classroom clock and clock models of plastic or felt
Large numerals made of wood, sandpaper, or felt
Toy telephone
Toy cash register and play money
Games such as lotto, bingo, dominoes, peg boards and puzzles
Sand and water play equipment
Measuring tools such as measuring sticks, primary rulers, plastic cups, measuring tapes, balance scales, thermometers, step-on scales
Felt or flannel boards and materials to arrange
Writing materials
Teacher-made games, charts, task cards and other materials

Math materials may be purchased or teacher-made. Refer to the Equipment and Materials section of this resource book for commercial material as well as a complete list of general materials for center use. Parents may be glad to contribute materials or help to make games for the children to use. Materials such as scales, which may be used infrequently, can be borrowed from primary grade teachers or shared among several kindergarten teachers. Materials that are frequently used should be stored where the children can help to put them away. Flat materials such as flannel board pieces, charts, or cards may be stored in file cabinets or large boxes. Materials should be kept clean, attractive and in good repair. Teachers will want to continually add to and update their collection of materials. Patterns for various activities found in this section are located at the conclusion of this seciton.

INSTRUCTIONAL TECHNIQUES

The kindergarten classroom should be a busy, happy place where children show their eagerness to learn and natural curiosity. The kindergarten classroom is typically full of child-centered conversation and inviting materials for learning. Children work independently and engage in small group work in centers for a large part of each day. They work with their teachers in shorter large group situations which must be well-planned and interesting to keep the children's attention. The schedules of activities strike a balance between instructional group sizes, indoor and outdoor activities, teacher-initiated and child-initiated activities, and active and passive activities. A balance is also planned among verbal, manipulative, and creative activities. Mathematic experiences for young children should emphasize concept development, skill development, and attitude development. Early childhood educators must work to build children's concepts (or main ideas) about quantities, positions, shapes, and patterns. Concept development should be based on many concrete experiences. Concept development is more than memorization of vocabulary; rather it concerns building of main ideas with which children organize their expanding worlds. Appropriate mathematics activities also lead to development of social and physical skills as well as academic skills such as classifying objects, writing numerals, and naming coins. Attitude development is also extremely important. With appropriate experiences and encouragement, young children can grow confident in their ability to understand mathematics. They perceive math as fun, creative, and challenging rather than dull or impossibly difficult.

As they plan math activities, as well as activities in other curriculum areas, teachers should provide for three interrelated aspects: verbal, symbolic, and physical.



Both children and teachers should verbalize or talk about the math situation. They may symbolize the situation using numerals, diagrams, graphs, or other representational symbols. The physical aspect involves manipulation and use of materials such as counters, felt board shapes, large wooden numerals, or measuring cups. Use of all three aspects helps to ensure that each activity is well-balanced in terms of presentational forms.

Generally in planning for math activities, teachers should read an activity carefully making sure they understand the purposes and ways to measure the objectives. They should gather the appropriate materials and plan questions they might use to increase the children's interest or to gain insight into the children's understanding. For many activities, the teacher should first show the children what to do and then work toward the children being able to do the activity independently.

Teachers should spend time showing children how to use and care for equipment. They can motivate children by establishing and reinforcing the rules that everyone helps to take care of equipment to keep it nice for everyone to use. Teachers must plan time for children to help to put equipment away. When materials are kept in suitable, sturdy, easy-to-use containers, cleanup time is simplified. Praise and encouragement help children to be eager and efficient helpers at cleanup time. Teachers should see cleanup time and caring for materials as opportunities to teach and reinforce the important attitudes of responsibility and helping others.

When new materials are introduced, teachers should try to build pride and interest in the materials. They might show the children catalogs from which materials were ordered or the boxes in which they were delivered. They might describe that they purchased clothespins at the local variety store or proudly show the new felt cutouts they made the previous afternoon. Teachers should also plan for a period of free exploration with materials before teacher-directed activities proceed. Without this introductory period, children will be unable to use materials for learning; they will focus on the materials themselves rather than the mathematical ideas the materials represent. Teachers should allow the children to sort, feel, arrange, talk about, and manipulate the materials in other acceptable ways. The period of exploration should be followed by a demonstration of how to put the objects away.

Some of the activities in this section are intended for use by a large group. Some of these can be continued in small groups or by individuals. Other activities are intended for small groups of children or individuals. Small group work can occur at talbes, on the floor, out-of-doors, or at specified learning centers. Ordinarily, the teacher can start a small group working, then leave the group to continue working independently. The teacher can come back to observe the group, ask a few questions, or ask children to "show me what you've been doing".

Small group and independent individual work are extremely important. This type of work lets each child be actively involved in "on task" a greater proportion of the time than in large group work. As children take part and experience success, they gain self-confidence and enthusiasm for learning. They learn to take the initiative as they participate. Children realize that they are able to think independently, solve problems, communicate their findings with others, and use materials to explore mathematics situations. Active participation by all children is essential for individual growth. Children learn mathematics (and all areas) by doing as well as by watching and listening.

The activities in this section are suggestions for effective teaching and learning of math at the kindergarten level. Teachers will want to supplement these ideas with favorite activities of their own, ideas from reference books, and seasonal math activities. Teachers will want to say ideas to suit the needs and interests of children in their classes. Teachers must also vary the time spent on activities according to the children's interest and needs.

INSTRUCTIONAL MANAGEMENT

Teachers should assess the children's mastery of objectives by careful but informal observation. Opportunities for children to work on and master objectives must be numerous. Kindergarteners will not master concepts or skills after a single exposure. By observing the children's actions and words, and by asking questions, teachers can gain an impression of which children show understanding of particular objectives for learning activities. For instance, if a teacher works with a small group of children on an activity where children are to try to match members of two sets and tell if the sets have the same number members, the teacher can watch each child and see whether he or she understands the task and puts the objects in one-to-one correspondence or not. The teacher can ask the children to tell which set has more or fewer members than the other set, then assess the correctness of the children's responses. The teacher can give extra attention and additional experiences to the children who do not seem to be mastering the objectives. In a large group activity, the teacher can note which children volunteer to participate and which children can successfully complete tasks or answer questions when they are asked. The teacher should also note social behaviors such as completion of tasks, taking turns, and sharing of materials.

Teachers should also measure and record the children's progress by more formal means. An efficient means of assessment is use of a checklist. Kindergarten teachers can use a checklist early in the year to record evidence of the children's abilities. They may also wish to check the children in January. Toward the end of the school year the checklist should be used again to record the children's abilities after almost a year of instruction.

Teachers may mark the checklist as they work and talk with individual children. For instance, a teacher may set up many independent learning activities for the children on several different days. While the children are working, the teacher may call individual children to him or her and ask them to count objects, match sets of counters, or identify geometric shapes. Teachers may also use the checklist as groups of children are working. The teacher may observe and record such behaviors as careful and correct writing of numerals, completion of tasks, or classification of objects into sets.

Teachers and administrators must realize that children will progress at different rates in mathematics as well as in other subjects. To expect all children to enter with the same skills or to master the same objectives at the same time ignores sound child development principles. The goal for all children's mathematical growth must be progress-- each child should be challenged but not frustrated.

The following checklist is a suggested form for use in Mississippi Kindergartens. Teachers should notice that it has 3 different levels of achievement for the objectives: objectives that most children will master, objectives that only some children will master, and objectives intended for readiness, exposure, and enrichment rather than mastery. The checklist provides a form on which teachers could record data for an entire class. This method lets the teachers observe and record data for several children without shuffling papers. A data sheet completed in September could be laid beside a sheet completed in May for easy comparison. Teachers may also wish to color-code check marks for evaluations made early and later in the year, thus using just one form for the entire year. Some teachers or school districts also wish to keep individual checklists for each child. They should reproduce the checklist on separate forms and keep the forms in each child's cummulative folder.

Mathematics Objectives

	Names															
THINKING SKILLS AND VOCABULARY																
Sorts, classifies objects according to																
color*																
shape*																
size*																
Describes sets of objects**																
Places objects in relational to each other using																
above, below, on*																
under, over*																
right, left, middle**																
inside, outside*																
Describes relation of objects using positional words																
above, below, on*																
under, over*																
right, left, middle**																
inside, outside*																
Chooses bigger and smaller objects from a set of objects*																
ONE-TO-ONE CORRESPONDENCE																
Places sets of objects in correspondence*																
Tells if sets are equal or not*																
COUNTING AND COMPARING																
Orders three objects from smallest to largest*																
Chooses the largest and smallest from a set of 5 objects*																
Rote counts																
1-5*																
6-10*																
above 10**																

*Most children will master the objective

**Only some children will master the objective

***Only a few children will master the objective; intended for exposure, readiness, and enrichment.

Counts rationally																
1-5*																
6-10*																
above 10**																
Tells the greater or smaller of two sets*																
NUMBERS AND NUMERALS																
Tells number of members of a set																
1-5*																
6-10*																
above 10**																
Identifies numerals																
1-5*																
6-10*																
above 10**																
Orders numerals																
1-5*																
6-10**																
above 10***																
Writes numerals																
1-5*																
6-10**																
above 10**																
Recognizes number words																
1-5**																
6-10**																
GEOMETRY AND MEASUREMENT																
Chooses geometric shapes																
square*																
circle*																
rectangle*																
triangle*																
Names geometric shapes																
square*																
circle*																
rectangle*																
triangle*																
Chooses shapes																
curved, or straight**																
flat, solid**																

Identifies shapes
- curved, straight**
- flat, solid**

Uses measuring tools***

Participates in measurement experiences***

BEGINNING OPERATIONS

Joins sets of objects and tells sum*

Separates sets and tells difference*

Makes equal sets and tells total*

Divides objects evenly*

Writes number sentences to represent operations**

INTEGRATED ACTIVITIES

Participates in graphing experiences*

Tells about and interprets graphs**

Participates in experiences with calculators and computers***

Participates in cooking experiences*

Participates in experiences involving time*

Participates in experiences involving money*

Identifies coins
- penny**
- nickle**
- dime**
- quarter**

Knows coin values
- penny**
- nickle**
- dime**
- quarter**

OTHER SKILLS AND BEHAVIORS

Exhibits good small motor control

Exhibits good large motor control

Follows simple rules and instructions																
Takes turns when working with 3-5 children																
Completes tasks																
Offers to answer questions																
Is willing to answer questions when asked																

Title: Sorting Buttons

Objective: The child will demonstrate his/her ability to categorize objects.

Materials: Buttons (about a cup full of red, white and black buttons), frozen orange juice cans (3)

Procedure: Cover one juice can with white paper, one with red paper, and one with black paper. Then, have the children spread the buttons out on a table. Instruct the children to place red buttons in the red can, black buttons in the black, and white buttons in the white can.
Variation: Sorting can be a greater challenge when another dimension is added. Prepare three more cans larger than the juice cans. Cover them with the three colors of paper. The instructions now become: Place the small red buttons in the small red can and the large red buttons in the large red can. Place the small white buttons in the small white can and the larger white buttons in the large white can. Place the small black buttons in the small black can and the large black buttons in the large black can.

Buttons can be sorted by number of holes: Place all buttons with two holes in a pile; place all buttons with four holes in a pile; place all buttons with no holes together.

Evaluation: The teacher observes and records if the child can correctly sort the buttons by putting all like buttons together.

Title: Sorting

Objective: The child will be able to demonstrate visual association skills.

Materials: Select items to be grouped. Examples: buttons, dried beans colored popcorn, bottle caps, wallpaper samples

Procedure: Child sorts items in a given group according to like characteristics. Items can be sorted and placed in containers or simply placed in stacks in front of child. Buttons can be sorted according to size, color, number of holes, etc. Beans can be sorted by kind, color, size, etc. Popcorn can be sorted by color. Bottle caps can be sorted by size. Wallpaper samples can be sorted by solid colors, stripes, and florals.

Evaluation: Teacher recorded observations; as the child tries to correctly sort like items.

Title: What's the Sound?

Objective: The child will be able to sort objects that are alike.

Materials: Shoe box, five different kinds of small objects: marbles, beans, pennies, rubber bands, bottlecaps, etc., five margarine tubs with lids

Procedure: In a shoe box, mix together five different kinds of small objects. Give five children the margarine tubs, one each. Assign a different object to each of the five children. Ask each child to collect all the objects of that type from the shoe box and put them into his or her container. Then have the children put the lids on their containers. Collect the five containers and set them on the table. Let children take turns shaking each container and guessing from the sound it makes when shaken which kind of object is in each container. After a child has guessed the contents of the containers, have him or her mix up the containers for the next child to guess.

Children can sort any variety of items: buttons, beads, nails, toothpicks, counting disk, etc.

Evaluation: Teacher observation and recording as well as the child's response to what is in the containers when shaken.

Title: Category Collections

Objective: The child will refine small motor skills by manipulating small objects; to provide practice in sorting objects and pictures, to increase vocabulary (names and characteristics of objects and pictures).

Materials: Collections of objects and pictures described below, devices for sorting objects described below.

Procedure: You can add lots of interest to sorting activities by letting the children do interesting things with small objects and pictures as they sort them. Using devices such as flannel boards, sorting pockets, or hood boards develops children's small muscle skills and hand-eye coordination. Be sure to encourage lots of discussion about the objects and pictures children are to sort; discuss their names, colors, functions, shapes, and other characteristics. Use activities such as these:

Clothing Categories Cut pictures of all sorts of clothing. Attach a small piece of sandpaper or felt to the back of each picture. Have children place them on a felt board with a child's figure on it. Make categories of clothing such as these: things to keep you warm, things for your head, things to wear below your waist, things to wear on your feet, and things worn mainly for decoration. Some patterns are included in the pattern section.

Magnet Sort Use a steel cookie sheet with several magnets attached. Have children hold small objects up to the magnets and see which attract and which do not attract. Use objects made of various metals, a few coins, items made of sponge, cloth, paper, and wood.

Mail Boxes Make mail boxes from cylindrical snack containers or half-gallon milk cartons. Label each mail box with a color sample or a color name. Glue pictures of colored objects to envelopes. Let a group of children sort the envelopes placing them in the correct mailbox according to their color.

Plants and Animals Construct a hookboard by inserting cup hooks or flat-end nails into a smooth board. Divide the board into two sections--one for plants and one for animals. Mount small pictures of animals and plants on cards. Punch a hole in the top of each card. Let children take turns drawing cards from a stack, discussing them, and hanging them on the (hook board) in the correct category.

Sorting Board--For Names Fix another sorting board from sturdy posterboard and paper clips. Cut slits for category names and paper clips in the poster and insert paper clips. Work with small name cards for the children's names. Have the children read the name cards and attach them in the correct places using categories such as boys and girls, names with five or fewer letters and names with more than five letters, or names of one syllable or more than one syllable.

Push-Pin Pictures Supervise children carefully as they work with push-pins. Let them sort pictures of foods they like and dislike. They can discuss pictures of foods and attach them to a cellotex board with push-pins or thumbtacks.

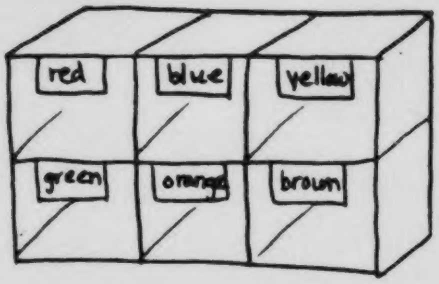
Pretty Pockets Sew clear plastic pockets to a scarecrow character or a plain pocket chart. Let children sort pictures into the pockets. You might use pictures of people and machines, houses and business buildings, or indoor and outdoor scenes.

Evaluation: Teacher observation and recording of children's work--How well do they name and discuss pictures? Do they categorize picture correctly? Do they suggest bases for categorization? How skillfully do they manipulate the materials?

Title: Magnet Fishing

Objectives: The child will gain practice in sorting and ordering, gain practice in using vocabulary (thick, thin, color words, longer, shorter, hot, cold), and will have opportunities for counting.

Materials: Magnet fishing pole, pictures, paper clips, cardboard shapes, paper fish, paper pond or box.


red
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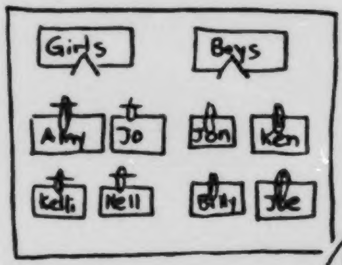
mail boxes


Girls
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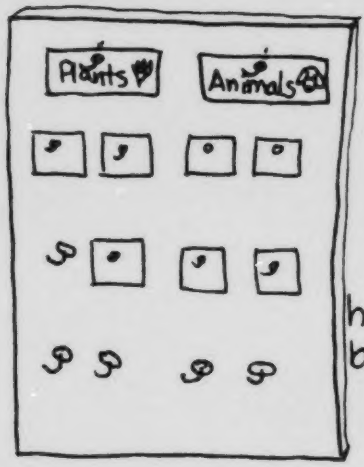
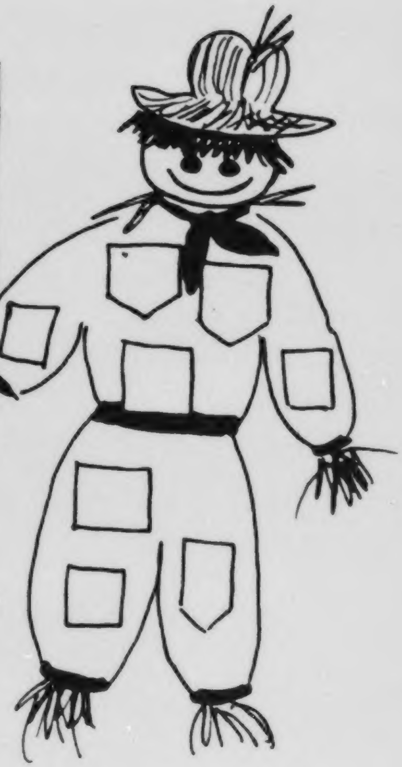
Kelli
Nell
Billy
Joe

sorting board


Plants
Animals

hook-board



scare crow with pockets

Title: Magnet Fishing

Objectives: The child will gain practice in sorting and ordering, gain practice in using vocabulary (thick, thin, color words, longer, shorter, hot, cold), and will have opportunities for counting.

Materials: Magnet fishing pole, pictures, paper clips, cardboard shapes, paper fish, paper pond or box.

Procedure: Magnet fishing is fun because of its element of suspense. Once objects are caught they can be described, ordered, counted, or sorted. Prepare pictures or fish shapes by cutting them out and attaching a paper clip to each. Place them in a paper "pond" or box. Let children take turns fishing for the objects and working with them. Use some of these formats or others to suit your purposes.

Fishin' Fun Let each child catch 4 or 5 fish of different lengths, count them, and then arrange them in order according to length. Some patterns are included in the pattern section.

Catch A Shape Provide different geometric shapes (circles, square, rectangles, triangles). Have children name them and sort them into categories according to shape or color. Use thin paper, medium thickness poster board, and thicker cardboard to cut shapes from. Also ask children to sort the shapes according to thickness.

Hot or Cold? Cut small picture of foods, clothing, and activities that could be classified as hot or cold. Let children fish for the pictures, discuss them, and sort them into piles.

Evaluation: Teacher observation and recording of children's work and discussion--Can children answer questions about the objects they "catch"? Do children initiate discussion, making their own sentences about their objects? Can children count the objects? Can they place the objects in order from shortest to longest or thickest to thinnest?

Title: Holiday Sorting

Objective: The child will be provided with opportunities for sorting real objects and pictures, to develop vocabulary (names of items and category names).

Materials: Collection of objects suitable for holidays or seasons.

Procedure: Work with holiday sorting lets you increase the spirit and excitement associated with a holiday while practicing the important skills of sorting, observing, and learning precise vocabulary. Prepare a collection of objects and pictures associated with a holiday. Place the collection in a tray or box. Invite a small group of children to examine the collection. Let them name the objects and describe them. Suggest ways to sort the collection and have the children complete the sorting process. Let the children suggest more ways to sort the collection then make various arrangements of the materials.

Some suggestions for holiday materials are:
Labor Day: Many Workers Use pictures of people at work and tools associated with different jobs. Include real objects

such as simple tools, kitchen appliances, pens and paper, sports equipment, empty pill bottles, or model vehicles.

Halloween: Scary but Fun Include pictures of Halloween activities, treats, and costumes. Collect small pumpkins, candy wrappers, masks, and fall plants.

Christmas: Giving and Sharing Gather pictures of different sizes of families, wintery scenes, holiday ornaments, and foods. Include small durable ornaments, Christmas cards, pine cones, and bits of gift wrap.

Valentine's Day Sorting Sort a collection of old valentines on the basis of color, size, picturing of animals or people, hearts or no hearts, or other qualities.

Springtime and Easter: Renewal of Life Collect pictures of spring clothing, Easter symbols, flowers, springtime scenes, eggs, and animals. Add Easter models, real or plastic flowers and small Easter baskets to your collection of "sortables."

Honoring Families: Mother's and Father's Day Have children discuss and sort pictures of families, family activities, people helping and loving each other, gifts for people, and homes. Emphasize differences in family organization, sizes and life styles. Also include small objects suitable for giving to parents or other family members.

Evaluation: Teacher observation and recording of children's responses--Can children name and describe objects? Can children sort objects into groups? Do children suggest ways to sort the collection of objects? Can children count the objects successfully?

Title: String Story

Objective: The child will participate in discussion in an unusual way, and increase his/her vocabulary (concerning size, number, position, shape).

Materials: String story board with characters.

Procedures: The string story board is easy to make and to change for different purposes. Using the string story delights children because of the element of surprise it uses. Prepare a string story board as pictured below. Attach characters to pertain to a topic you are studying or to summarize a story the children like.

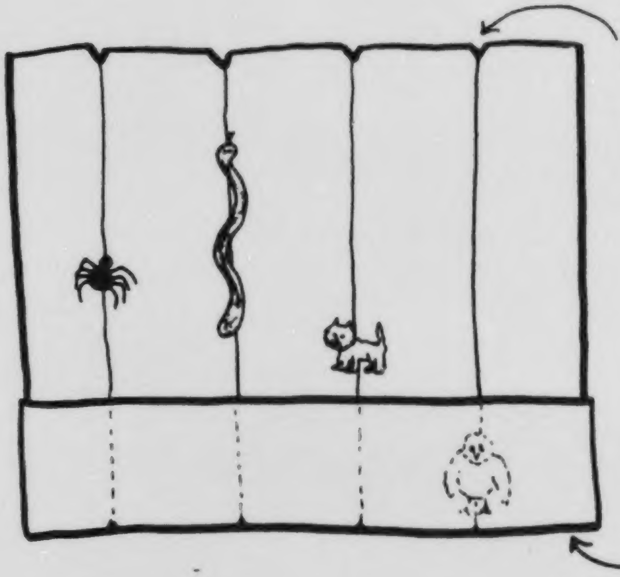
Raise and lower the characters on the string story board. Ask children questions such as "Which character come up first?", "Which character is highest?", "What shape is this?", "Which character is in the middle?", or "How many do you see?" Use some theme such as these:

Fruits Attach pictures of fruits to the story board. Vary the numbers of fruits such as 2 bananas, 5 grapes, or 1 orange. Talk to the children about the nutritional values of fruits as well as math-oriented quesitons as suggested above.

Shape-Ups Tell a short story about Ms. Triangle and various characters she meets on a stroll. You might include Mr. Square, Richie Rectangle, and the Circle Twins. Let each shape ask a child to help to count its sides as it is raised on the story board.

Animals Describe some animals and let the children guess what they are. Raise each on the string story board. Say the number of legs on the animals. For example: snakes have no legs; bees have six legs; spiders have eight legs; and dogs have four legs. Use proportioned drawings and ask the children which animal is the longest and shortest. Vary the positions of the animals and ask which is on the right and left.

Evaluation: Teacher observation and recording of children's responses--Can the children identify right and left, top and bottom, up and down, middle position, shapes, colors, numbers of characters?


Notches help to keep the strings in place.
Strings wrap around the cardboard and are tied in the back.
Characters are taped or stapled to the strings.
Characters are hidden beneath a card board flap

Title: Locations

Objective: The child will demonstrate the meaning of positional words.

Materials: Button, index cards

Procedure: Give one child one button and an index card. Ask him to place the button as you give directions.

Put the button under the card.
Put the button on top of the card.
Put the button beside the card.
Put the button below the card.
Put the button above the card.
Put the button beneath the card.

Let the children take turns giving directions and performing the actions.

Evaluation: Teacher recorded observation of the children as they perform the directions given.

Title: Little Mouse

Objective: The child will demonstrate the meaning of inside and outside.

Materials: Large cardboard box, copy of story

Procedure: Bring in a large cardboard box which is large enough for the children to crawl inside of. Select two children to be the characters in the story and crawl inside and outside the box as you tell the story.

Little Mouse lived inside a big box where it was cozy and safe. One day, Little Mouse crept outside its box house and went looking for a piece of cheese. All at once Little Mouse saw a hungry cat--MEOW! Little Mouse ran back inside the box house quickly. Little Mouse thought Cat was gone and crept outside again. MEOW! Little Mouse heard Cat. Back inside ran Little Mouse. This time Little Mouse waited until night when Cat was asleep to go outside. And Little Mouse was able to find some cheese and get back inside the box house before Cat woke up.

Evaluation: Teacher recorded observation of the children as they illustrate inside and outside when the words are read in the story.

Title: Near 'n' Far

Objectives: The child will: practice counting and following directions, work with positional words (near, far, right, left, some distance), and exercise large muscles.

Materials: None

Procedure: Work with a small outdoors or in a large indoor area. Give some instructions and have all the children move at once. For example you might say, "Turn around. Take four big steps away from me. Hop three times." Pause and ask the children about some relationships. "Who is nearest to me?" "Who is to the right of Tammy?" "Who is farthest away from Joseph?" Call the children back close to you and start again giving similar instructions. After awhile, you can let the children give instructions and ask questions too.

Evaluation: Teacher observation of children's responses--Do they count correctly? Do they move in the correct directions? Can they answer the questions you ask? Can the children give directions and ask questions skillfully?

Title: Act It Out

Objective: The child will demonstrate conceptualization of a mathematical vocabulary.

Materials: None

Procedure: Invite the class to act out the meanings of these pairs of words with you. Use objects as suggested or make up your own.

high--low	Reach up and down.
above--below	Indicate 2 objects in these positions.
wide--narrow	Measure with hands; indicate width of two objects.
long--short	Measure with hands; show long and short pencil.
big--little	Measure with hands, or show large and small book.
few--many	Show three beads and then a handful.
over--under	Jump over a rope; raise it and walk under it.
off--on	Push a beanbag off the top of a table; put it back on again.
inside-outside	Point to a crayon inside a box; place it outside.
first--last	Assemble a row of 5 children; ask first and last child to raise their hands.
backward--forward	Walk in these directions.
heavy--light	Weigh a book in one hand and a feather in the other.
in front of-behind	One child stands in front of and another child stands behind the teacher.
back--front	Point to back and front of a bookcase.
top--bottom	Point to the top and bottom of a closed jar.
different--alike	Compare any two objects.

Invite children to draw pictures illustrating the two words in each pair.

Evaluation: Teacher observation of the children as they act out the pairs of words.

Title: Positions 'Round the Room

Objective: The child will gain practice using positional words (above, below, under, over inside, outside, right, left).

Materials: None

Procedure: Understanding of positional words is important as children learn to use language precisely and as they practice following directions. This game requires children to use positional words and allows for creativity in answers.

Ask children to look around the classroom and find examples of objects in certain positions. You might ask for several answers to each question. For instance, if you ask "What's above the table?", children might name a picture, a window, the curtains, and the ceiling. You can ask some questions with a whimsical tone: "What might we find under the rug if we lifted it up and looked underneath?" "I have a surprise inside my purse. What might it be?"

For mature children, introduce two qualities to the position game by asking questions such as "What's under the table on our left?" or "What is below the window but above the floor?" Children's responses might be recorded on an experience chart.

Evaluation: Teacher recorded observation of children's responses

Title: Small Group Position Play

Objectives: The child will practice counting and using positional words.

Materials: Small counters and containers

Procedure: Children can demonstrate their knowledge of positional words and numbers in this easy activity. Gather some small props such as marbles, styrofoam trays, blocks, plastic margarine cups and lids, and crayons. Ask children to take turns doing simple tasks with instructions such as:

"Judy, put 2 marbles inside the cup."
"Alan, put a red crayon on top of a block."
"Sandra, pile up 3 blocks and then put them under the table."

Vary the game by performing a task and letting the children tell you what you have done.

Evaluation: Teacher recorded observation of children's responses.

Title: Concept Cards

Objective: The child will develop and demonstrate conceptualization of a mathematical vocabulary.

Materials: Small cards, glue, object to illustrate words

Procedure: Children can make these vocabulary cards by gluing small objects to small cards or squares of posterboard. After they complete the cards, ask them to show them and tell the matching words.

inside	outside	Beans glued inside and outside a circle of yarn
long	short	different lengths of straws
wide	narrow	wood pieces of different widths
on	off	one small box with cover on and another small box with cover off
curved	straight	strips of yarn
heavy	light	rock and piece of styrofoam
some	none	peas on one card and nothing on the other card

Evaluation: Teacher recorded observation of the child completing the concept cards as instructed. Can they tell you the difference in the two words?

Title: Jar Lids

Objectives: The child will practice sorting, increase vocabulary (words to describe color, material, size), increase observation skills, practice ordering.

Materials: Collection of jar lids

Procedure: Children like to manipulate and handle jar lids. They can use lids in a number of ways. Be sure that the lids have only smooth edges and that a collection with a wide variety of colors, sizes, and materials is used.

Allow a small group of children to handle the jar lids, perhaps stacking, sliding, and counting them. Now show the children one way to begin sorting the lids--perhaps by color. Have the children finish the sorting. Now ask the children for another way the lids could be sorted (perhaps by size--large, medium, and small--or material such as plastic or metal). Let the children complete the sorting. Give each child a handful of jar lids and let him put them in order from smallest to largest.

Evaluation: Teacher observation of children's work--Can children finish a sorting task? Do children suggest characterisitics for sorting? Can children put lids in order from smallest to largest?

Title: Spooky Sequence

Objective: The child will practice patterning and sequencing.

Materials: Halloween candy, posterboard, markers, construction paper, clear contact paper.

Procedure: Cut posterboard into strips about 4 inches by 10 inches. Cut candy shapes from construction paper, or draw the candy with magic markers on the strips of posterboard to form various patterns. Leave space for the children to place real candy at the end of the strip. The children complete the patterns shown on the sequence strips by placing real candy in the same pattern on the end of the strip.

This can be varied by making patterns using Valentine candy hearts, Christmas candy or candy canes, Easter candy or egg shapes, etc.

Evaluation: Teacher recorded observation to determine if the child can correctly complete the candy pattern given on each strip.

Title: Help the Puppy Make Up His Mind

Objectives: The child will practice following directions and attaching meaning to positional words.

Materials: Felt to make dog, bones, and dishes, pattern. Directions printed on card for teacher. Pattern given in Pattern Section.

Procedure: Using the pattern given, cut out dog, ten dishes and fifty-five bones from felt or pellon. Print the directions given below on a card for the teacher to read to the child. Place a number one through ten on each of the dishes. Say to the child, "I'm going to read some directions to you. Take the bones and do exactly as I tell you. Help the puppy make up his mind."

1-Put three bones on dish number 1.
2-Put one bone over dish number 2.
3-Put two bones at the bottom of dish number 3.
4-Put four bones at the top of dish number 4.
5-Put two bones beside dish number 5.
6-Put four bones under dish number 6.
7-Put one bone in dish number 7.
8-Put two bones below dish number 8.
9-Put three bones near dish number 9.
10-Put six bones around dish number 10.

Vary directions according to the individual child and the level of the class. These are only suggestions.

Evaluation: Teacher recorded observation of child's response to verbal directions.

Title: Correspondence Games

Objectives: The child will practice one-to-one correspondence, and work with greater and lesser sets.

Materials: Simple materials as described for each game.

Procedure: Have children practice matching and one-to-one correspondence in many different ways. Try some of the following suggestions or create your own games.

Glasses 'N' Straws Children can play this one-to-one correspondence game prior to a tea party or before a special snack time. Let children place containers that can serve as glasses for a tea party. You may not use straws everyday for a snack, but for a special treat, let a few children place a straw (perhaps cut in half for safety) into each child's cup. Ask the children whether they have enough straws or not.

Jar Lids I Use canning lid rings for this unique math activity. The materials' sensory appeal helps to make the matching concept meaningful. Provide a box of attractive objects such as pieces of sponge, medium sized rocks, used tennis balls, bean bags, or milk jug lids. Gather a sackful of canning lid rings. Let the children take turns getting a handful of each material and laying them on the table. They should see if they have enough rings to put a ring around every object from their handful. For instance a child may get 4 canning rings and 6 rocks. He then has enough rings to put around some of his rocks, but has 2 rocks left over. After taking turns, let the children lay out all the materials and match as many pairs as they can.

Outlines This outline game teaches visual discrimination as well as one-to-one correspondence. For easy storage, make outline games inside file folders. Trace the outlines of common objects, numeral cutouts, or geometric shapes inside file folders or onto poster board. Let children place objects on top of each outline. Work with children to see that they are finished, when each outline has its partner--the real object.

Cowboys and Cowgirls Cowboy and girl cutouts are fun to play with and can be used for many matching activities. Make felt or paper cowboys and girls, horses, and other props such as yarn ropes, hats, and saddles. Have children perform many one-to-one correspondence activities such as matching riders to horses, hats to people, ropes to people, or saddles to horses. Encourage children to talk about and count the characters. Some patterns are included in the pattern section.

Jack-In-A-Box Who can resist a jack-in-a-box, especially when it's small and soft? Use appealing "jacks" for yet another one-to-one correspondence activity. Prepare "jacks" from old socks and nylon hose. Gather several margarine cups or spray can lids. Invite children to put each jack in a box. Then ask children to take turns with tasks such as these:

Jump the second jack-in-a-box out of its box.
Count the jacks. Count the boxes.
Find the biggest jack and let it jump out of its box.
Take every jack out of its box, "shuffle" them and start again.

For work with number-numeral concepts, mark jacks with dots. Match them to boxes with numerals.

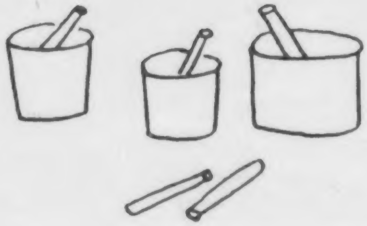
Jar Lids II This activity lets children practice a useful skill--putting on lids. It also features more practice in one-to-one correspondence. Gather many small jars with lids and plastic containers with lids. Let children match jars and lids at random to see if there are the same number of each. Then challenge them to find the correct lid for each jar and put the lid on. The children could also be asked to do tasks like the following:

Find the widest jar.
Find the tallest jar.
Tell the shape of any lid.
Point to the third jar.
Show me the jar that might hold the most.

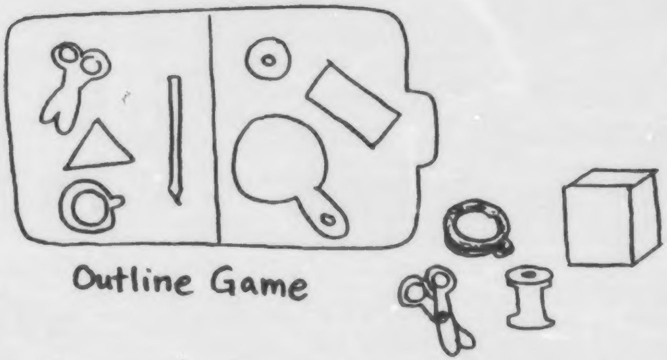
Children will also enjoy working over newspaper and pouring water into each jar.

Workers and Helpers This one-to-one correspondence activity lets children see pictures of all kinds of people at work with a modern "helper"--the computer. Ask children to find lots of pictures of people and computers in magazines and newspapers. Cut the pictures out. Let the children match each computer with a person. Each child can then select a "pair" that he or she likes and glue it to paper. Stress the idea that many different kinds of people use computers to help them do many different kinds of work.

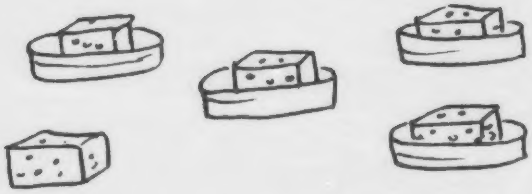
Evaluation: Teacher observation of children's responses--Do they match objects successfully? If one set has more members than another, can the children tell which is more and less? Do they manipulate the materials skillfully?



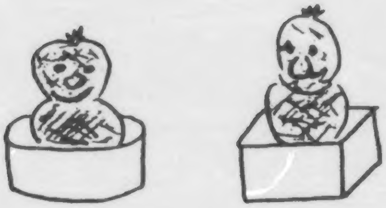
Glasses 'N' Straws



Outline Game



Jar Lids I



Jack In A Box

Title: People, Hats, Balloons, and Houses

Objective: The child will demonstrate an understanding of one-to-one correspondence.

Materials: Flannelboard, flannelboard cutouts of 3 people, 3 hats, three balloons, and three houses

Procedure: Place three people on the left side of the flannelboard and ask children to place a hat on each person's head. Emphasize that there are as many hats as people. Next ask children to place as many balloons as people on the flannelboard. Have a string attached to the felt balloons so that they can place a string in each persons hand. Tell the children you want to have as many houses as people on the board but you want them on the right side of the flannelboard. Continue with other similar examples to which children count one-five objects.

Evaluation: Teacher recorded observation of the children as they follow the directions given.

Title: Punchy Pairs

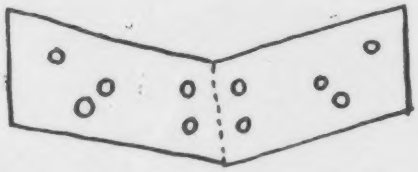
Objective: The child will increase small motor skills by using paper punchers and crayons; to gain experience with one-to-one correspondence.

Materials: Small pieces of thin paper such as adding maching tape or computer paper, paper punchers, crayons.

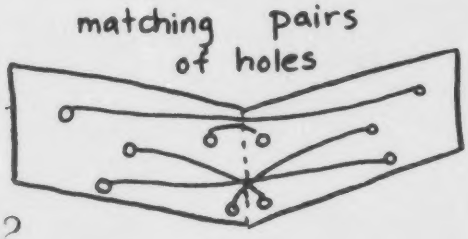
Procedure: This activity utilizes paper punchers that are so attractive to children and produce neat little symmetrical designs. Work with a small group of children. Show them how to fold a section [Pieces of adding machine tape about 15 cm (6 in.) long or pieces of computer paper about 10 x 15 cm (4 x 6 in.) are easy to handle.] and punch holes through both layers. Unfold the papers and see the resulting designs.

Have the children draw over the fold line on their papers to delineate the two halves. Have them join each hole in one half with a hole in the other half until all the holes have "partners." Let the children write their names on their papers. Post some of the papers on a bulletin board with dark-colored background.

Evaluation: Teacher observation of children's work--Do they handle the paper punchers skillfully? Do the children match the holes successfully?



symmetrical design



Title: Snack Time One-to One Correspondence

Objective: The child will demonstrate the concept of one-to-one correspondence.

Materials: Any materials that need to be distributed to the children, such as napkins, cookies, milk, etc.

Procedure: Say to the children, "Let's count all the boys and girls to see how many children are here today." When finished say, "We have 16 children here today. How many napkins will we need if we give one to each child?" Ask one child to distribute napkins as you and the children count out loud.

When the napkins have been distributed, reinforce the one-to one concept. Emphasize that 16 children require 16 napkins.

As a follow-up activity ask the children how many napkins will it take for 14 children? For 18 children? Then include the teacher and ask how many napkins will it take for 16 children and one teacher?

Evaluation: Can the children tell you how many items it will take for a certain number of children if all children have one item?

Title: Cutouts and Correspondence

Objective: The child will be able to practice one-to-one correspondence, to draw features and accessories.

Materials: Paper, crayons, glue, pictures of people cut from magazines and catalogs, glue

Procedure: This activity allows for choices and creativity in drawing; it also provides more practice in working with one-to-one correspondence. Let children select a picture of a person, cut it out, and glue it to paper. Then ask children to draw one added feature or accessory to the picture--a hat, a ball, a belt, or a purse for example. Let the children take turns showing their completed drawings and telling about them.

Vary the activity by letting the children cut one feature off the pictures they choose (a hand for example). Then glue the pictures to paper. Next the children draw their version of the feature back onto the picture. Also discuss pairs of features and accessories found in the pictures. Examples are pairs of arms, legs, shoes, eyes, or ears.

Evaluation: Teacher observation of children's work--Do children cut and glue the materials neatly? Is their drawing appropriate for their level? Can children accurately tell what they have done with their drawings? Can children name some pairs of features found in the pictures?

Title: More Correspondence Games

Objective: The child will be able to practice one-to-one correspondence.

Materials: Simple materials as described for each game.

Procedure: The activities described in the following section provide more opportunities for children to practice one-to-one correspondence or one-to-one matching. Prepare the materials and let children count the objects after they are matched.

Boll Weevils and Other Critters Sometimes boll weevils can be appealing! When? When they're made of felt or paper and help children practice one-to-one correspondence. Make paper or felt boll weevils and cotton bolls. Have children match one weevil on each boll. If you can't get excited about boll weevils and cotton bolls, you might want to make a set of butterflies and flowers, bees and hives, spiders and webs, or caterpillars and leaves. Some patterns appear in the pattern section.

Mother and Babies Animal mothers and babies make appealing pairs for a one-to-one correspondence activity that also develops children's science knowledge.

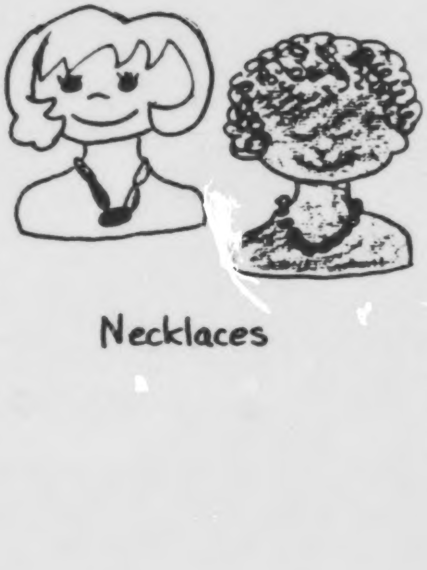
Make a set of cutouts of animal mothers and babies. You might use big and small whales (pups), dogs and puppies, cats and kittens, butterflies and caterpillars, dinosaurs and eggs, or horses and colts. Let children match them so that each mother has a baby. You might have the children work with one kind of animal, or might mix so that each "mom" must be paired with her correct kind of offspring. Can you add other animal mothers and babies children would enjoy?

The Friendly Octopus To complement study of animal life, use this friendly octopus to "hold" his friends--other sea creatures. Make an octopus of paper or poster board. Make a series of other sea creatures such as fish, sponges, star fish, or turtles. Ask the children to put one creature on each arm of the octopus. Children can play the octopus game on the floor or a table top. To make a neat bulletin board, attach a bit of velcro to the back of the other sea creature cutouts. Firmly pin or staple the octopus to the bulletin board. Let the children take turns putting the sea creatures onto the arms. The octopus arms can also hold letter, word, or numeral cards. Some patterns for sea creatures are in the pattern section.

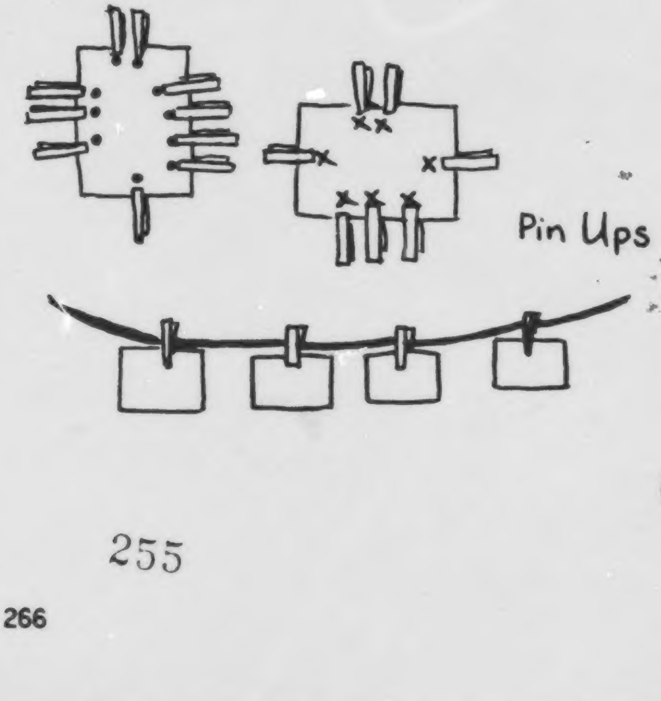
Necklaces Here's a fun way to use those extra costume jewerly necklaces and encourage comparing to correspondence activities as well. Use several dolls or make people's faces of posterboard and tongue depressors. Attach the heads to a board or sturdy piece of styrofoam. Collect several necklaces. Let the children see if there are enough necklaces to go on each doll or head. Have children put one necklace on each. If there are necklaces left over, encourage the children to see how many they can put on each doll or head so that all have the same number. (Of course this illustrates division; there may or may not be a remainder.) Let the children count the necklaces on each doll or head.

Ask the children if there might be enough necklaces for each child in the class to wear one. Have the children distribute the necklaces to verify whether or not there are enough. Discuss the colors and other qualities of the necklaces.

Pin Ups Children like to manipulate clothespins. Put them to work on this game which provides opportunities for dealing with one-to-one correspondence as well as developing small motor skills. Prepare some cards (10 x 15cm or 4 x 6 in.) of posterboard or cardboard. Draw X's or dots near the edges. Encourage children to clip one clothespin on each X or dot. Once children can manipulate the clothespins, let them hang cards on a little clothesline. Hang the clothesline close to the wall for safety (so no one will bump it or trip on it) and for ease in handling cards. Kindergarteners might eventually hang numeral cards in order on a clothesline. Children can also pin one clothespin on each side of various polygons. As you discuss the names of the polygons (square, rectangle, triangle, octagon) have the children count the clothespins and tell the number of sides of each polygon.



Necklaces



Evaluation: Teacher observation of children's responses--Do children match objects one-to-one successfully? Do children discuss the objects they are working with? Can children count the objects as they work with them?

Title: Classroom Counting

Objective: The child will be able to develop the concept of counting.

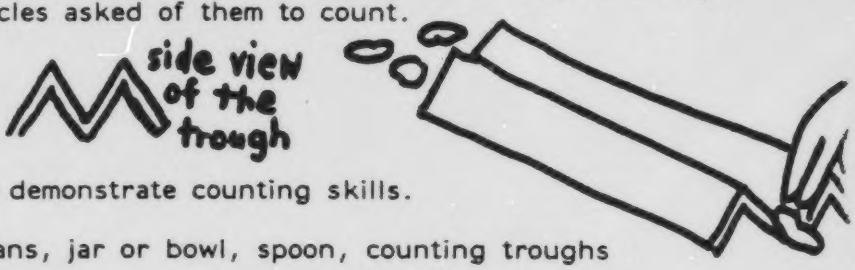
Materials: No special materials needed.

Procedure: Have the children count together with the teacher common, everyday articles in the classroom. Suggestions for classroom counting are:

Count the children.
Count the boys.
Count the girls.
Count the empty chairs.
Count the windows.
Count the red shirts, etc.
Count the brown headed children, etc.
Count the green eyed children, etc.

Use as a dismissal technique by letting the children counted leave the group for another activity or to go to lunch, etc.

Evaluation: Teacher recorded observation of the children as they correctly count the articles asked of them to count.



Title: Push a Bean

Objective: The child will demonstrate counting skills.

Materials: Large lima beans, jar or bowl, spoon, counting troughs

Procedure: This activity includes physical involvement as children count. It encourages rational counting--saying one number's name as an object is moved. Prepare enough counting troughs for each child in a small group. Make several little counting troughs of posterboard. (See diagram.) Let children take a big spoonful of lima beans from a jar. They should line up their beans in the trough, then count them as they push them through the trough.

Evaluation: Teacher observation of children as they move and count the beans.

Title: Teddy Bear

Objective: The child will gain practice in counting.

Materials: Flannel board, felt or paper teddy bear counters

Procedure: Use this variation on the jump rope rhyme to encourage counting. Let a group say the "Teddy Bear" rhyme while one child acts it out. Arrange teddy bear cutouts on a flannel board for the child to count. Vary the number of cutouts according to the children's ability. Encourage the child who is counting to move and arrange the cutouts as he or she counts.

Teddy bear, teddy bear, turn around.
Teddy bear, teddy bear, touch the ground.
Teddy bear, teddy bear, look at me.
How many teddy bears do you see?

A teddy bear pattern is in the pattern section.

Evaluation: Teacher observation of children as they move and count the teddy bears.

Title: A Counting Walk

Objective: The child will demonstrate ability in counting.

Materials: None

Procedure: Take a walk with your class and look for things to count and discuss. Examples are:

- wings on a bird
- cars going by
- trees without leaves
- leaves on the sidewalk
- fireplugs
- gates and fences
- hills in the distance
- garbage cans
- school buses parked outside
- blue cars
- puddles after the rain
- dogs or cats
- windows in school
- trucks going by
- stop signs
- crosswalks
- cracks in the sidewalk
- doors in the building
- red cars
- black cars

Evaluation: Teacher recorded observation of the child as he/she count things per instruction by the teacher.

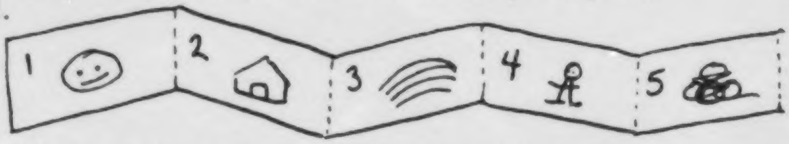
Title: It's In the Bag

Objective: The child will practice counting real objects and reinforce numeral-object relationships.

Materials: Task cards, paper bags for collecting objects

Procedure: Make task cards for collecting and counting nature items. Place each card in a paper bag and distribute among the children. Let children work in pairs or small groups of three or four. The child looks at the card and finds the correct number of the item after going outside. Examples of task cards may be: find 1 feather; find 2 rocks; find 3 pebbles; find 4 leaves; find 5 sticks, etc. Write the number and then draw a picture of the item to find or draw the number of items to be collected on each task card. After all children have completed the task assigned, go back inside and talk about your findings. Let each child count the number of items he/she found.

Evaluation: Teacher recorded observation of the children as they complete the task assigned.



Title: Fold and Count

Objectives: The child will be able to draw and count pictures, to promote small muscle development by folding paper, to write numerals.

Materials: Adding maching tape or strips of computer paper, crayons

Procedure: It's fun for children to work with a l-o-o-o-o-ng strip of paper in this counting activity. The activity results in a neat and different little booklet that each child can take home.

Let each child in a small group take about 50 cm (20 in.) of adding maching tape or a 50 cm strip of computer paper cut 10 cm (4 in.) wide. Show the children how to fold the paper strips into accordian pleats so that several rectangles result. Encourage the children to draw a small figure on each rectangle. Count the number of pictures and help each child write the correct numeral on the folded strip. Vary the size and number of rectangles on each number strip. Extension: Have children show the teacher their first picture, their last or 4th picture.

Evaluation: Teacher recorded observation of children's work--Do the children fold the paper successfully; Do children complete their drawings? Can the children count the pictures they have drawn? Do the children write numerals legibly?

Title: Magnet Comparison

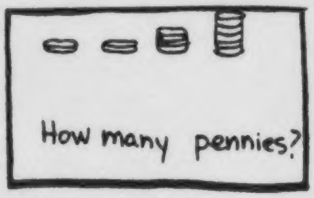
Objectives: The child will practice counting, amd compare sets and lengths.

Materials: Shallow boxes, paper clips, magnets

Procedure: Magnet power adds interest to this comparison activity. Put some large paper clips in a pile in one end of a large shallow box. Let children take turns holding a magnet under the box and using it to drag some paper clips to the other side of the box. Let each child take out and arrange the paper clips he or she attracted with the magnet. Lead children to compare and count their sets of paper clips. Let each make a chain of paper clips; stretch the chains out and compare their lengths.

You might also use another box with 2 compartments. Have 2 children use a magnet to drag some paper clips from the pile in the original box. Arrange the 2 sets of paper clips in the compartmented box. See if one set has more clips than the other or if one set equals the other.

Evaluation: Teacher recorded observation of children's work--Do children take turns using the materials? Do children count the paper clips correctly? Can they make the paper clip chains skillfully? Can children tell it sets are greater, less, or equal?


How many pennies?

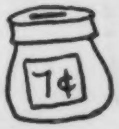
Title: Pennies

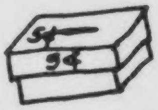
Objective: The child will demonstrate skill in counting.

Materials: Pennies, envelopes or coin purses, shoe box tops or small styrofoam trays

Procedure: It's fun to count pennies. They're easy to handle, meaningful to children, and neat to arrange. Place various numbers of pennies in each of several envelopes or old coin purses. Show children how to count the pennies by pouring them into a styrofoam tray or shoe box lid, then pushing them to one side as they count them. Ask children to stack their pennies in piles of fives or tens. Work simple problems by combining two trays of pennies and seeing how many there are in all. Stress to the children that the pennies are classroom learning materials and that they must be returned to the envelopes or purses for future use.

Evaluation: Teacher recorded observation of children's responses--Do they count rationally? Do they make stacks of pennies skillfully? Do the children deal with combining groups of pennies successfully? Extension: Have the children match pennies to circles drawn on task cards as shown below. Place different numbers of pennies in baby food jars. Have the children guess how many pennies are in each. Then count the pennies to see the actual numbers. Let the children count pennies into little labeled "banks" made from baby food jars or small boxes. Let them exchange banks and count the pennies to see if each contains the correct number.





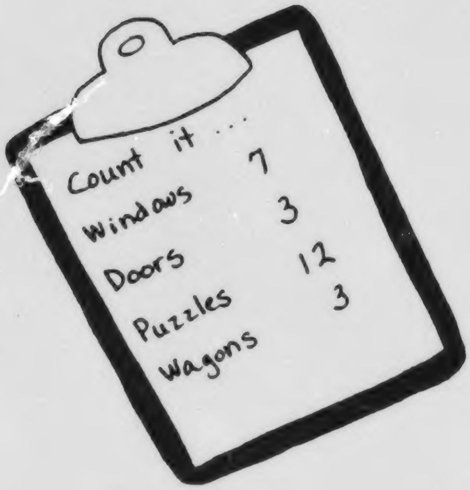
Title: Count and Record

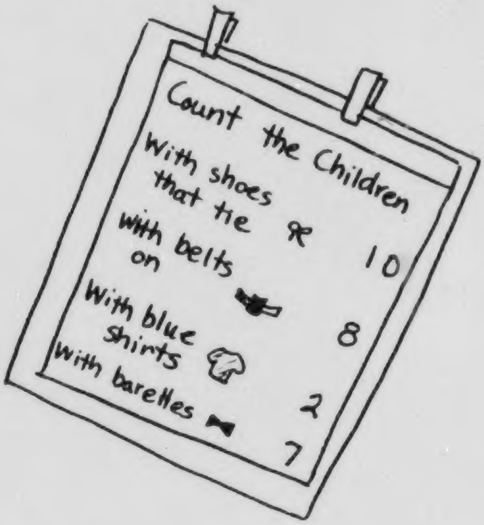
Objectives: The child will be able to count familiar objects, to record data.

Materials: Paper and crayons, tape, large chart, clip board

Procedure: It's fun for children to work in small groups and record data they can share with the class. Appoint different groups of two or three children to look around the room and count various items, record the numbers, and later report their findings to the class in group time. Children might be asked to count things such as the numbers of windows (and window panes), doors (including cabinet doors), puzzles, blocks (of different sizes) or books they find in the room. Let the children record their data on paper held in place on a clipboard. As each group reports, fill in a large chart. Discuss and compare the numbers from the chart. Another time, let groups of children count features of the children themselves such as how many are wearing belts, garments of a chosen color, shoes that tie, barettes, and so on.

Evaluation: Teacher recorded observation of children's responses--Do children count objects correctly? Can they record numerals successfully? Are children interested in the numbers on the chart?


Count it ...
Windows 7
Doors 3
Puzzles 12
Wagons 3


Count the Children
With shoes that tie 10
with belts on 8
With blue Shirts 2
With barettes 7

Title: The Whale Story

Objectives: The child will practice counting real objects as well as simple addition and subtraction skills by acting out the story as told by the teacher.

Materials: One paper cup with ten goldfish crackers (such as Pepperidge Farm) for each child.

Procedure: The children act out the following story as it is told by the teacher. Each child is given a cup with ten fish crackers in it before the story begins. This can be a small group activity or one-to-one.

The Whale Story
This is a story about a whale. He is a very special whale because he loves boys and girls very much. He is a happy whale and likes to swim around in the ocean smiling at children and looking for fish to eat.

In this story, all of you are going to be whales. Now who are the whales? Children respond that they will be whales. Let's swim around some. Teacher shows the children how to swim by placing the palms of both hands together and moving from side to side. And this is your ocean. Show children how to extend palms upward to make ocean. (The children do the same.)

One bright sunshiny day the whale was swimming around. All at once he saw two fish swimming near him. (Each child takes two fish out of his/her cup and places them in the palm of their hands.) "Boy, am I hungry," thought the whale and he gobbled up one of the fish. (Each child eats one fish.) Now that left how many fish? (Children count one.)

Pretty soon, two more fish came swimming by. (Child places two more fish in his/her hand.) Now how many fish is that all together? Child counts three. Now it didn't take the smart whale long to spy those three fish. He swam by and in a flash gobbled up one of the fish. Now that left . . .(Each child eats one fish and counts two.)

The whale was still hungry so he ate one more fish. (Each child eats one fish.) Now that left how many fish in the ocean? Child replies one. In a little while three more fish came by to join the one that was left. That made . . . (Child places three fish in the "ocean" and says four.)

Continue to add and subtract fish until all fish are gone. End story by saying the whale swam happily out to sea with a full stomach.

Evaluation: The teacher should observe each child as he/she listens to the story and counts the number of fish in the ocean as the teacher tells the story. Questions like, "How many fish are left?" or "How many fish does that make?", are asked throughout the story and the teacher can see by each child's response if he/she counts correctly.

Vary this activity by using Fruit Loops or Cheerios and making up a similar story about doughnuts. Tell this story over and over again to reinforce number concepts at different levels. Let children tell the story also.

Title: Listen and Count

Objectives: The child will practice counting, and develop listening skills.

Materials: Simple noise makers such as a bell, pair of blocks, drum, or coffee can partly filled with sand.

Procedures: Play "Listen and Count" for short periods of time. Ask the children to close their eyes and count a number of sounds you make. Ring a bell three times. Let the children show you a number of fingers for the number of rings they heard. Make another series of sounds such as five shakes of a coffee can partially filled with sand. Ask the children how many sounds they heard. Vary the number of sounds and noisemaker. Have the children take turns being the person who makes the sound for the others to count.

Evaluation: Teacher recorded observation of the children's response.

Title: Feed the Puppy

Objective: The child will be able to demonstrate the concept that each number is one more than the one before it.

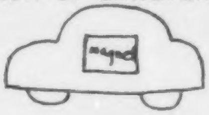
Materials: Posterboard, a box of dog bones from grocery store, a dog puppet (optional), scissors, black marker, clear contact, box for storage of game.

Procedure: Cut ten narrow strips of posterboard approximately 10 x 30 cm (4" x 12"). Trace dog bone treats into strips, starting with one on the first strip, two on the second, etc. Trace around bones with black marker. Cover strips with clear contact paper. Place strips and dog bone treats in a box for storage. Label: Feed the Puppy. The children put the bone cards in order one through ten. Place a dog treat over the bones on the card and count out loud as you do so.

The teacher can use a dog puppet to involve the children in following directions such as, "Feed the puppy from the card with three bones.", Feed the puppy from the card that shows one more than five."

Evaluation: Teacher observation of children's response to directions given.

Title: Magnet Cars

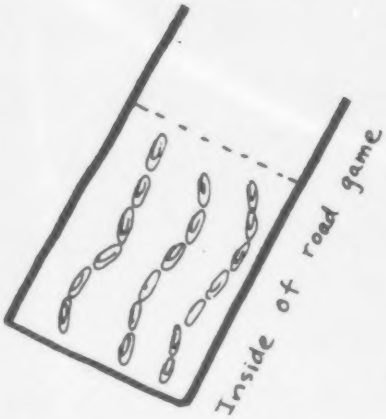


Objectives: The child will be able to associate numerals and numbers; to practice left to right tracking.

Materials: Pieces of construction paper, paper clips, pictures of cars, small magnets, clear contact paper, tape

Procedure: This little magnet game lets children work with numbers and numerals in an intriguing format while they practice the left to right movement that is important in reading and writing. Prepare the game by drawing "roads" and "garages" on paper as shown in the pattern section. Tape paper clips to the back of each "road" path and "garage." Cover the paper clips side with another piece of paper. Then cover the entire game with clear contact paper. Cut or draw small pictures of cars. Write a numeral on each car. Tape a small magnet to the back of each car.

Let children play the game by choosing the correct car for each road. They then "drive" the car on the road--the magnet attracts to the paper clips and gives an interesting tactile sensation as the car moves. Finally, the car is parked in its correct garage. Ask the children to count the dots on the garages to verify their choices of garages.



Evaluation: Teacher observation of children's work--Are cars correctly matched with garages? Do children "drive" the cars smoothly on the paths? Can children correctly name the numerals and count the dot patterns on the garages?

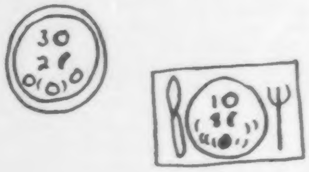
Title: Number Partners

Objective: The children will gain practice in associating numbers and numerals.

Materials: Games as described below, dice or number cubes

Procedure: The formats for number partner games can be varied almost endlessly. Create a similar game to fit your current unit of study. Prepare the game. Let a small group play with its parts. Ask the children to count parts of the game, to identify numerals, and to compare two numbers from the game telling which is greater and which is less. Some suggested formats follow. Patterns appear in the pattern section.

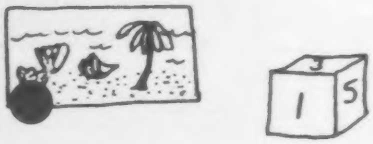
Spagetti 'n' Meatballs



Spaghetti 'n' Meatballs Prepare cards or paper plates with numerals on them. Provide "meatballs" made from little pompoms and pieces of dried macaroni. Let the children arrange the appropriate numbers of spaghetti and meatballs on each plate.

Birds of a Feather Make bird cutouts of felt or colored paper. Glue them to cards. Let children throw a die or number cube, then arrange the appropriate number of paper or real feathers in each birds' tail. This game might continue until each bird's tail has 12 feathers in it.

By the Sea



Die says 3, so child puts 3 shells on the beach.

Watermelon Seeds Draw watermelon slices or cut them from felt. Write a numeral on each. Have children arrange the appropriate number of real, dried watermelon seeds on each.

By the Sea Prepare cards with a picture of an ocean. Add a sandy beach to the bottom of each using sand and glue or sandpaper. Let children throw a die or number cube, then arrange the appropriate number of sea shells on each card.

Evaluation: Teacher observation and questioning--Do children read and understand the numerals? Do they choose the correct numbers of objects? Can children compare two numbers telling the larger and smaller?

Title: Hallobeans

Objective: The child will practice counting and recognizing numbers.

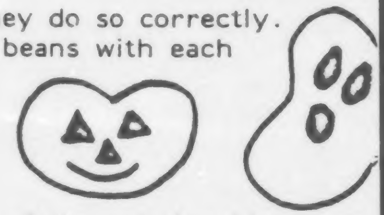
Materials: dry lima beans, orange spray paint, permanent fine line marker, black felt, orange felt, gray felt, cardboard, fabric glue

Procedure: Prepare a game board by covering a piece of stiff cardboard about 45 cm by 50 cm (18 x 20 in.) with gray felt. Cut out the haunted house shapes and glue with fabric glue onto the gray background. Make numbers one through ten from orange felt and glue one number to each house.

Spray paint fifty-five dry lima beans with orange paint. Let dry completely. Using a black permanent marker such as Sharpie, make a jack-o-lantern face on each of the orange beans. Turn them sideways to resemble a pumpkin. Note: Can leave the lima beans white and draw a ghost face on them turned lengthwise.

Tell the child to look at the number on each house and count out loud the same number of jack-o-lanterns or ghosts.

Evaluation: Listen to the children counting and see if they do so correctly. See if children match the correct number of beans with each house. Record observations.



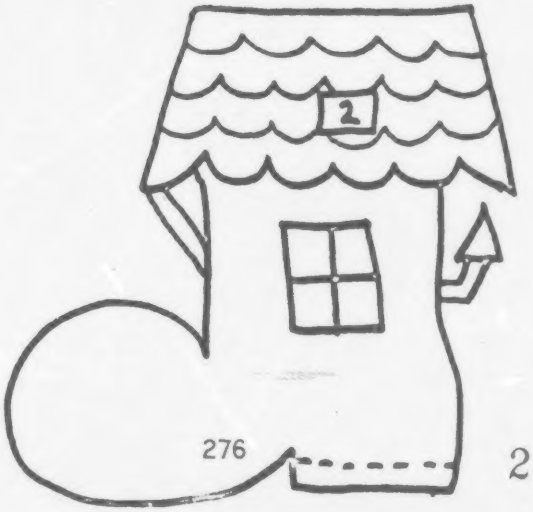
Title: Old Woman Who Lived In a Shoe

Objective: The child will demonstrate an understanding of the relationship of numerals representing how many, and will practice counting.

Materials: Pattern found in pattern section, wallpaper, file folder, construction paper, clear contact, glue stick, paper fastener

Procedure: Using pattern given in pattern section, cut out a large shoe and attach to inside of folder using glue. Decorate the shoe to look like a house by adding roof and windows. Cover inside of folder with clear contact. Cut out a square about 2 cm x 2 cm (3/4 x 3/4 in.) in the roof of the house. Make a wheel with numbers and attach to the folder so that it will turn and a number will appear in the square on the roof. Decorate the outside front of the folder and cover with clear contact. Attach a manila envelope or ziplock bag to back of folder to store game pieces. Cut out shapes of boys and girls using the pattern given from construction paper. Cover with clear contact. To play, the children turn the wheel and whatever number appears in the roof, they count that many children and place around the shoe.

Evaluation: Can the children correctly count the number of children as the number indicates? Record observations made.



Title: Pinnochinose

Objective: The child will demonstrate recognition of numerals and number dots.

Materials: Poster board, wallpaper, clear contact, clothespins, marker, pattern for Pinnochinose (Given in pattern section.)

Procedure: Enlarge the pattern given in the pattern section using an overhead projector. Use wallpaper to make hat and tie. Add facial features. Cover face with clear contact. On each clothespin place number dots one through ten. To play the children match the number dots to the numerals.

Clothespins may be painted before printing dots on them. Other concepts may be used. Examples are: Numbers to number words, numbers to numbers, shapes to shapes.

Evaluation: Can the child correctly match the numbers and number dots? Record observation made.

Title : Mr. Freckles

Objective: The child will gain practice of numeral/numeral word recognition.

Materials: File folder, wallpaper, stick on dots, clear contact, manila envelope, pattern for man and bow tie (Given in pattern section.)

Procedure: Using patterns given, cut out ten face shapes from flesh colored wallpaper. Add hair, eyes, nose and mouth to each. On each face place a different number of freckles using stick on dots. Attach faces to inside of folder in no particular order. Cover inside of folder with clear contact paper. From wallpaper cut out ten bow ties and place a number word 1 through 10 on each. Cover with clear contact. Decorate front of folder and attach a manila envelope to back for storage of game pieces. Count the freckles on each face and place the correct bow tie under each Mr. Freckles to play the game.

Evaluation: Can the child recognize the numeral and matching number word for each face? Record observations made.

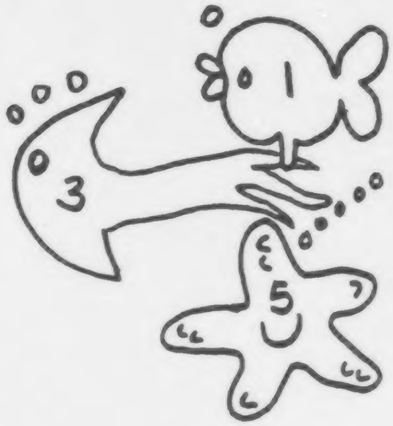
Title: Teeny Tiny Bubbles

Objective: The child will demonstrate understanding of the relationship of numerals representing how many.

Materials: File folder, wallpaper, clear contact, glue stick, pattern for fish and sea creatures, gummed reinforcements, manila envelopes

Procedure: Cut out 10 fish and/or sea creatures (Starfish) from colored wallpaper. Using a glue stick, attach each to the inside of a file folder. On each fish place a numeral one through ten. Cover entire folder with clear contact. On the outside front of the folder place the name of the game and decorate with fish. Attach a manila envelope to the back of the folder for storage of game pieces. The child uses gummed reinforcements to represent bubbles and sticks the correct number of bubbles by each fish as the number printed on the fish indicates.

Evaluation: Can the child correctly count the number of bubbles for each fish as indicated by the number printed on the fish? Record observations made.



Title: Ladybug Math

Objective: The child will be able to develop the skill of sequencing numbers from one to ten.

Materials: File folder, colored paper (red and black), clear contact or lamination, black marker, manila envelope for storage of game pieces. Stick on letters and numerals are optional.

Procedure: Using the patterns given in the pattern section for the underneath side of the ladybug, cut out ten red pieces and attach to the inside of a file folder. Now cut out ten ladybugs using the pattern in the pattern section from red paper. Color the heads of each ladybug black and place a black strip down the middle of each bug.

Using various orders of numbers from one to ten, skipping the number in the middle, print a number on each wing of the ladybug. Example: On one side print the number three and skip four, but place five on the other side of the ladybug. Place the missing numbers (the ones skipped) on the underneath sides of the bugs attached to the inside of the folder. Cover with clear contact or laminate.

Decorate the outside of the folder and attach a manila envelope to the back side of the folder to store game pieces in.

Instruct the child to look at the numbers on the wings of the ladybug and place it over the correct underneath side of the bug so that the three numbers will be in correct sequence.

Evaluation: The teacher can observe and record those observations of each child as he/she puts the numbers in correct order. Questions like, "What comes after three?" or "What number comes before six?" can be asked.

This activity may be an individual activity or a small group activity.

Title: Pipe Cleaner Snakes

Objective: The child will be able to practice forming numerals.

Materials: Pipe cleaners (10 for each child participating); copy of rhyme

Procedure: Read the following rhyme aloud while writing numerals on the chalkboard. The children are given ten pipe cleaners each to form the numerals. It takes one pipe cleaner for each numeral with the exception of the four which takes two.

One little snake when the day had begun,
Stretched straight and tall and it made a 1.

There were lots of things Little Snake could do,
It curved around and made a 2.

Little Snake was happy as it could be,
It curved around and it made a 3.

Little Snake went out to explore,
It met a cousin and they made a 4.

Little Snake saw a buzzing beehive,
It crawled away quickly and made a 5.

Little Snake could do a lot of tricks,
It curved its body and made a 6.

Little Snake formed two lines and even,
Made its body into a 7.

Little Snake wants to celebrate,
It curved its body and made an 8.

Little Snake found a leafy vine.
It curved around and then made a 9.

Evaluation: Teacher recorded observation as the child forms each numeral. Can the child make the numeral asked in the rhyme?

Title: Playdough Numerals

Objective: The child will be able to manipulate numerals and the numbers they represent; to provide tactile experiences in forming numerals.

Materials: Playdough, numeral cards, clear contact paper

Procedure: This activity combines the fascinating process of working with playdough and more reinforcement on numerals and numbers. Prepare playdough numeral cards. Some examples appear in the pattern section. Cover the cards on both sides with clear contact paper.

Have children roll some playdough into a worm-like shape and use it to cover the numeral shapes on the cards. Then have the children select the number card to match with each numeral and cover the number objects with balls of playdough. Have the children tell you the numerals and count the objects.

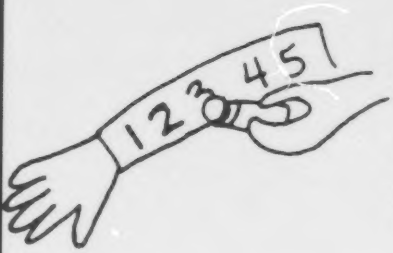
Evaluation: Teacher recorded observation of children--Do they handle the playdough successfully? Can they say the numerals and count the numbers correctly? Do they match the cards readily?

Title: Writing Numerals

Objective: The child will gain practice writing and forming numerals through a wide variety of tactile experiences.

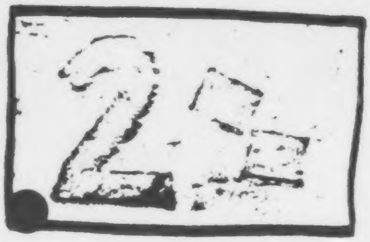
Materials: Paper, crayons, other materials indicated below

Procedure: Let children practice forming and writing numerals in a wide variety of ways. To refine skills, many opportunities over a period of time are necessary. Provide clear, carefully written examples of numerals as children work with writing activities. Numeral patterns for cutouts are in the pattern section. You might use some of the following activities.



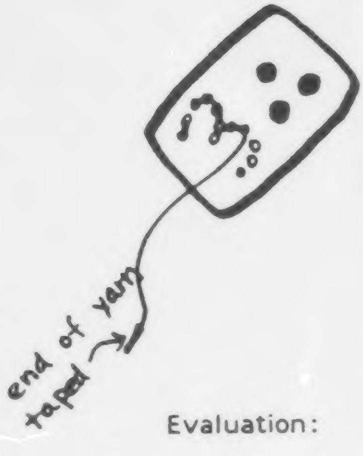
Deodorant Bottle Writing Thoroughly clean a deodorant bottle and fill it with clear water or water and a few drops of food color. Let children use the bottle to form numerals on their palms or on a sock placed over their arms.

Sandpaper Numerals Have children feel and trace large numerals cut from sandpaper and mounted on cardboard.



Rub-A-Numeral Show children how to make crayon rubbings of numerals and the numbers they represent. Place a numeral cut from thin cardboard under a sheet of paper. Hold the paper in place and rub over it with the side of an old crayon. Have the children draw the appropriate number for each numeral or place the appropriate number of shapes near the numeral and rub over the shapes. Children can also write the number name by their rubbings of numerals.

Yarn Numerals Have children arrange yarn bits on a flannel board to form various numerals. Once they form a numeral have them place the appropriate number of shapes beside it. Children also stitch numerals through holes punched in styrofoam trays. They can use large blunt needles for their stitchery or you can simply use a bit of tape over the end of the yarn for a stiff needle-like device.



Glue Numerals Lightly write numerals on paper or help children to do it. Let children spread glue over the outline then sprinkle rice, sand, computer card bits, or other material over the glue. Each child can make a set of numerals for arranging, identifying, or matching with objects.

Cover It Write large numerals on cards. Have children cover each numeral shape with small tiles, blocks, or pieces of paper.

Evaluation: Teacher recorded observation of children's work--Do children form numerals neatly? Do they handle materials skillfully? Do children associate numerals with the appropriate numbers?

Title: Numeral Searches

Objective: The child will gain practice in numeral identification and practice in hand-eye coordination from a cutting and pasting activity.

Materials: Newspaper ads, crayons, paper, scissors, glue

Procedure: The newspaper abounds with numerals! Use newspaper pages to add interest and variety to your study of numerals and numbers.

Give each child or pair of children a page from the newspaper. To find lots of large numerals, you might use the grocery ads. Some children can use a quarter or half page of the newspaper more successfully than a full page. Ask the children to circle all the examples of a chosen numeral such as 2 that they can find. They might next use another color to find and circle all the 5's they can find. After they have worked on each numeral have the children find an appropriate number of pictures to go with their numeral. For example, they might find two apples or five cans of soap illustrated in a grocery ad.

Another day the children work in pairs of threes. Give each group the large outline of a numeral drawn on paper. Have the children find lots of examples of the numeral and cut or tear them from the newspaper, then glue them to the large outline. You can post the results on a bulletin board for future reference.

Still another newspaper numeral search can be conducted. Write numerals 0-10 for each child on a long strip of paper or let children write the numerals themselves. Then the children find, cut, and glue the numerals to the long strip.

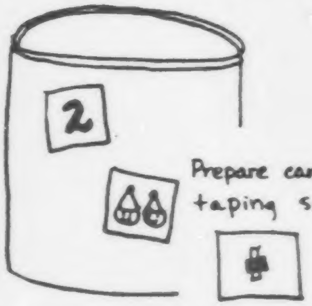
Evaluation: Teacher recorded observation of children's work--Do they find many correct examples of each numeral? Do they cut and paste numerals successfully? Do they complete each activity?

Title: Stick Up Numerals

Objectives: The child will gain practice identifying numerals, and representing numbers.

Materials: Metal surface such as magnet board, surface of file cabinet, steel cookie sheet, or large coffee can, numeral cards, small pictures drawn or glued to cards, small magnets or pieces of magnetic tape.

Procedure: Magnets add on "attractive" touch to this number-numeral activity. Attach a bit of magnetic tape to the back of each numeral or picture card or tape a small magnet to the back of each. Place the numeral cards in one container and the picture cards in another container. Let a small group of children take turns drawing cards from the numeral container, saying the numeral, and sticking the numeral to the magnetic surface. Then ask each child to find the appropriate number-picture card and attach it beside the numeral card. You can also add number word cards in a third container and use these for more matching.



Prepare cards by taping small pieces of magnetic tape on the backs.

Evaluation: Teacher recorded observation of children--Do they name numerals correctly? Do they associate numerals and number pictures or words correctly? Do they take turns cooperatively?

Title: Punchy Numerals

Objectives: The child will develop small muscle strength through use of a paper puncher, represent numbers, recognize and write numerals.

Materials: Small pieces of thin paper such as computer paper or adding machine tape; several paper punchers, crayons or pencils

Procedure: Punching holes in paper is a sensory math experience. Children hear the puncher click as it makes holes. They see the holes and can feel them in the paper. Paper punching activities can be readily done if each child works over a large piece of paper. When he/she has finished punching a series of holes, she can dump her mess into an appropriate container.

Show the children how to use a paper puncher. Let them punch various patterns through one and two layers of paper. (The paper works well if cut into pieces about 8 x 12 cm or 3 x 5 inches.) Write some numerals on little pieces of paper and ask the children to read the numerals and punch the appropriate numbers of holes. Let the children punch some holes, then count them and write the appropriate numeral. Save the punched-out paper dots for art activities.

Evaluation: Teacher recorded observation of children's work--Do the children punch the correct number of holes when told a number? Do they read numerals correctly? Can they count the number of holes they have punched? Can they write a numeral for each number of holes? Do they work neatly and clean up after themselves?
Variation: Let each child use several small pieces of paper and punch and write each numeral from one to ten. Staple the pages together to make a little number booklet.

Title: Smurfy Dress Up

Objectives: The child will be able to manipulate color words, number words and positional words; to use ordinal numbers; to work with number-numeral associations

Materials: Paper or felt smurf cutouts, paper or felt smurf clothing (Pattern given at back of this section.)

Procedure: Children enjoy working with the lovable smurfs and practice following directions at the same time! Prepare a poster with 5 or 6 smurfs or make smurfs of felt to use on the flannel board. Make clothes for the smurfs of paper or felt. Let children work with the smurfs, "dressing" them as you give instructions such as these:

Put a red hat on the second smurf.
Put 2 items of clothing on the first smurf.
Put something below the waist of the fourth smurf.
Also let the children give some directions for others to follow.

To stress number-numeral concepts, you could also label each set of smurf clothes with dot configurations. The set of "one" clothes can on on the first smurf, the set of "two" clothes can go on the second smurf, and so on. Patterns are found in the pattern section.

Evaluation: Teacher recorded observation of children's responses--Can children choose and "dress" the correct smurfs? Do children give directions effectively? Can children match the number and numeral clothing successfully?

Title: Turkey Tails

Objective: The child will be able to to practice sequencing-type activities.

Materials: Pattern for turkey and tail feathers (found in Pattern Section), Heavy paper or posterboard, scissors, one paper fastener, hole punch, different colored posterboard for feathers, clear contact paper

Procedure: Using pattern given in pattern section, cut out turkey's body and add facial features. Color. Cover with clear contact paper. Punch hole in turkey's body as shown by X on the pattern. From colored posterboard, cut out tail feathers and place a number on each near the tip of the feather. Punch hole in each feather as indicated on pattern. Using brass fastener, attach feathers in any order to turkey's body. Do not use correct sequence. The child arranges the turkey's tail feathers in the correct sequence.

Evaluation: Teacher recorded observation--Does the child arrange the numbers of the tail feathers in correct sequence?

Title: Show Me

Objectives: The child will be able to manipulate numbers and numerals.

Materials: 5 to 8 small numeral cards for each child

Procedure: This activity lets everyone participate at once and lets the teacher check answers at a glance. It is fun to conduct the activity silently for a minute or two; no one, including the teacher need say anything, yet everyone can take part.

Pass out several small numeral cards to each child. Each child need not have one of each numeral. Ask the children to spread out their numeral cards and to respond by looking at their numerals and holding up the correct card or cards to respond to each question. Use questions such as these: Show me a seven. Show me a numeral to match this one. (You hold up a numeral card.) Show me a card that means this many. (You hold up five fingers.) Show me some numerals less than this. (You hold up a "four" numeral card.) Let the children take turns being the leader. Keep the sessions with "Show Me" short and fast-paced.

Evaluation: Teacher observation of children's responses--Do children pay attention? Do they hold up the correct numeral cards? Do they find answers quickly?

Title: Toss and Count

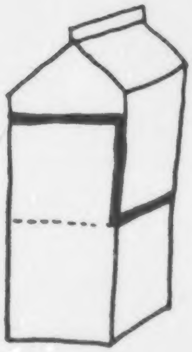
Objectives: The child will demonstrate his/her ability in reading numerals and counting.

Materials: Number cubes, counters, paper clips

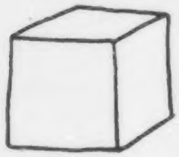
Procedure This activity features numeral reading, counting, and comparing. The element of chance makes it attractive and suspenseful. Make one or more number cubes from quart or half-gallon milk containers. Measure the length of the bottom of the carton. Transfer this distance upon the sides so you have 5 equal squares. Add one more square on one vertical side. Cut out the carton as shown. Bend down and tape the sixth square in place. Cover the squares with construction paper or contact paper. Write a numeral on each side.

Use the number cubes for various games. One way to play is to use a pile of counters such as golf tees, small blocks, or felt cutouts. Have a small group of children take turns throwing the cube and taking the number of counters shown on the cube. When all the counters are gone the children should line up and compare their numbers of counters. Children can also make paper clip chains, adding the number of paper clips shown on the number cube.

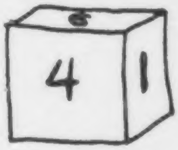
Evaluation: Teacher recorded observation of children's work--Do children choose the correct numbers of counters? Can children say the numerals shown on the cube? Can child tell who has more or fewer counters?



Cut on dark lines.

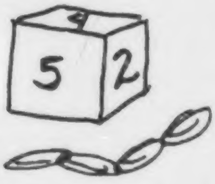


Fold down and tape to form a sturdy cube.



Write numerals on the faces.

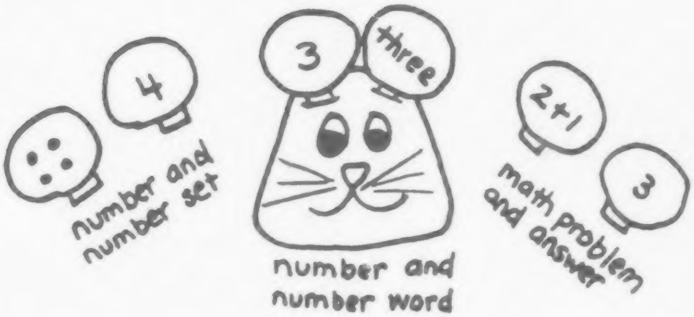
Use the cube to toss and count.



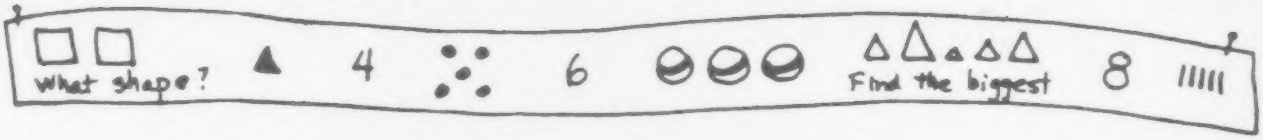
paper clip chain

Making the number cube.

Title:	Go Togethers
Objective:	The child will demonstrate knowledge in basic math skills.
Materials:	Pattern of mouse found in pattern section, posterboard, markers, scissors, clear contact, x-acto knife,
Procedure:	Cut out mouse from posterboard and color in features. Cover with clear contact paper. Using an x-acto knife, cut out slots as indicated on pattern. Cut out pairs of ears. On each pair of ears print matching math facts, etc. number and number words, number and number sets, or beginning addition or subtraction facts. Cover ears with clear contact paper. The children look at the pairs of ears and correctly match them, for example, 4 to number word four.
Evaluation:	Teacher recorded observation


4
3
three
2+1
3
number and number set
number and number word
math problem and answer

275



Title: Number Walk I

Objective: The child will gain practice in numeral and number identification.

Materials: Number and numeral representations written on sentence strip paper, shelf paper, or other long paper.

Procedure: This number walk provides teacher-directed or independent practice in reading numerals and identifying numbers. Post the strip of numerals and numbers at the children's eye levels. Walk along the strip with two or three children, asking them to read or tell what they see. Encourage the children to walk along the strip independently. Vary the contents of the strip according to the children's abilities or the theme you are studying.
Variation: Write numerals and number representations on feet made of contact paper or construction paper. Affix the feet to the floor and encourage children to walk on them and discuss them as they go along.

Evaluation: Teacher observation of children's responses

Title: Number Walk II

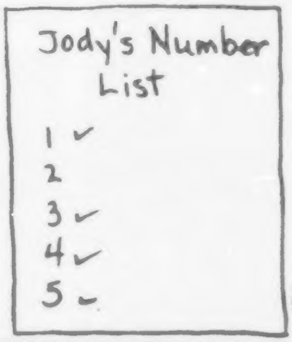
Objective: The child will gain practice in reading numerals and counting objects.

Materials: Lists of numerals for children, crayons

Procedure: Give each child a list of numerals--from 1 to 5 or 1 to 20, depending on their ability. Take a walk and let the children read any numerals they see. They might find numerals on signs, house numbers, vehicles, or other locations. Let them check off each numeral on their list as they find it. Also ask the children to count various objects as they find them. They might find 7 steps, 4 fence posts, 5 parked cars, or 1 stop sign for example.

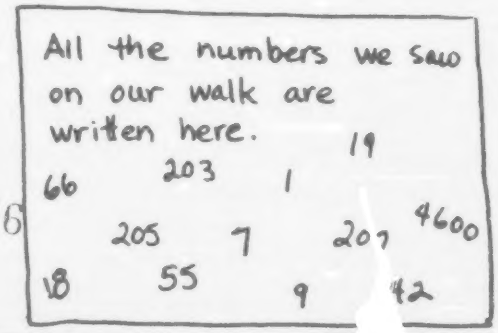
Write an experience chart describing your experience when you return from the number walk.

Evaluation: Teacher observation of children's responses--Do children look for numerals? Can they identify some numerals correctly?



Jody's Number
List

1 ✓
2
3 ✓
4 ✓
5 ✓



All the numbers we saw
on our walk are
written here.

19
66 203 1
205 7 207 4600
18 55 9 42

Title: Way Down Yonder in the Paw Paw Patch

Objective: The child will demonstrate number/numeral knowledge.

Materials: Set of numerals 1-5, or 1-10, depending on children's level, copy of song

Procedure: The children sit in large semi-circle. The numerals are hidden in advance by the teacher around the room where they can easily be found by the children. Choose five children to stand in front of the group while everyone sings: (to tune of "Paw, Paw Patch")

Where, oh where are all the numerals,
Where, oh where are all the numerals,
Where, oh where are all the numerals,
Way down yonder in the paw-paw patch.

As the children go to find the numerals, they sing:

Come on friends let's go find them,
Come on friends let's go find them,
Come on friends let's go find them,
Way down yonder in the paw-paw patch.

As each child finds a numeral, he or she stands next to it and waits until all the numerals are found, the children then pick up the numerals and go back to the circle singing:

Pick up the numerals and bring them to your teacher,
Pick up the numerals and bring them to your teacher,
Pick up the numerals and bring them to your teacher,
Tell us the numeral that you have found.

Title: Mary Had A Little Number

Objective: The child will demonstrate number/numeral knowledge.

Materials: Set of numerals (1-5 or 1-10, depending on children) Copy of song (Numeral patterns given in Pattern Section.)

Procedure: The numerals are placed on a table or on the floor. One child chooses a numeral and shows it to the rest of the group. (Be sure the numeral is facing the group correctly.) Everyone sings: (Tune: "Mary Had A Little Lamb")

Child's Name has a little two, little two, little two,
Child's Name has a little two,
It has a special shape.

Write the numeral in the air with one hand and sing:

This is how we write a two, write a two, write a two,
This is how we write a two. It has a special shape.

Repeat all numerals.

Evaluation: Can the child correctly identify the numeral he or she chooses? Record observed responses.

Title: The Muffin Man

Objective: The child will demonstrate number and/or numeral knowledge.

Materials: Two sets of numerals (1-5 or 1-10, depending on the level of the children), copy of song

Procedure: The children sit in a circle. The teacher keeps one set of numbers and places the other set out on the floor in the center of the circle. One child is chosen to stand in the center of the circle. The teacher holds up a numeral and everyone sings:

Oh, do you know the numeral (one)
The numeral (one), the numeral (one)?
Oh, do you know the numeral (one)?
It looks just like this.

Sing to the tune of:
"The Muffin Man"

The child in the center picks up the matching numeral from the group on the floor and everyone sings:

Oh yes, we know the numeral (one)
The numeral (one), the numeral (one)
Oh yes, we know the numeral (one)
It looks just like this.

Another child is chosen to go to the center of the circle and the song is repeated using another numeral.

You may also want to write the numeral in the air with one hand and sing:

Oh, can you write the numeral (one)
The numeral (one), the numeral (one)?
Oh, can you write the numeral (one)?
It looks just like this.

Evaluation: Can the child in the center of the circle correctly choose the numeral indicated by the song? Record observed responses.

Title: For He's A Jolly Good Fellow

Objective: The child will demonstrate understanding of number sequence.

Materials: Number cards

Procedure: The children sit in a circle. Number cards 1 through 10 are hung in front of ten children. (Fewer children can participate if the group is learning to sequence fewer numerals. It is also desirable to give out one number at a time the first few times the game is played so that the group can say the name of each numeral being given out.) Be sure each child knows which numeral he or she has been given. Number one is the first child and the leader of the game which is played like, "Follow the Leader." Number 2 is second and follows number 1. Number 3 is third and follows number 2. The children remain seated until it is their turn to play (follow). The children sing:

The two follows the one,
The two follows the one,
The two follows the one
As we walk in a row,
As we walk in a row,
As we walk in a row
The two follows the one
As we walk in a row.

(sing to the tune of: "For He's A Jolly Good Fellow")

Sing next, the three follows the two and so on until all children are following in sequence.

Evaluation: Can the children correctly follow one another in proper sequence? Record observed responses.

Title: Number-Numeral Board Games

Objectives: The child will gain practice in associating numbers and numerals; and will demonstrate social skills necessary for playing quiet games.

Materials: Board games as described, dice or number cubes, spinners, number-numeral cards, game markers.

Procedure: Learning to play number board games can increase children's social skills--taking turns, following rules, and finishing tasks--as well as letting children work with numbers and numerals in an enjoyable context. Prepare a board game or use a ready-made board. Prepare number cubes, spinners, or cards and game markers. Show children how to play the game. Emphasize that everyone should finish the game rather than quitting when the first player has finished. Vary the numbers you are working with according to the children's needs. Patterns for game boards, number cubes, spinners, and markers are found in the pattern section. Try the following games or invent similar one of your own.

Snail's Pace Players each place a marker on the inside of the snail's shell. They take turns spinning the spinner and moving the indicated number of spaces until each has reached the outside of the shell.

Road Race Players move markers along the road as they roll the number cube.

Ups 'n' Downs Players take turns drawing cards and moving the indicated number of spaces on the Ups 'n' Downs game board. This game is suitable for use with numbers larger than 10.

Evaluation: Teacher observation of pupils' understanding and participation - Do pupils move their markers the correct numbers of spaces? Do pupils follow the game rules? Do pupils take turns? Does each child complete the games?

Title: Outdoor Fun With Numbers and Numerals

Objectives: The child will develop large muscle skills such as running, hopping, and jumping; practice following directions; use numerals and numbers in active games.

Materials: Balls or beanbags, large number cubes, gallon milk cartons weighted with a little sand, cardboard or canvas markers.

Procedure: Show the children how to play the following games or others you may invent. Play the games as required activities sometimes; other times let participation in the games be optional. Let children suggest variations to the games.

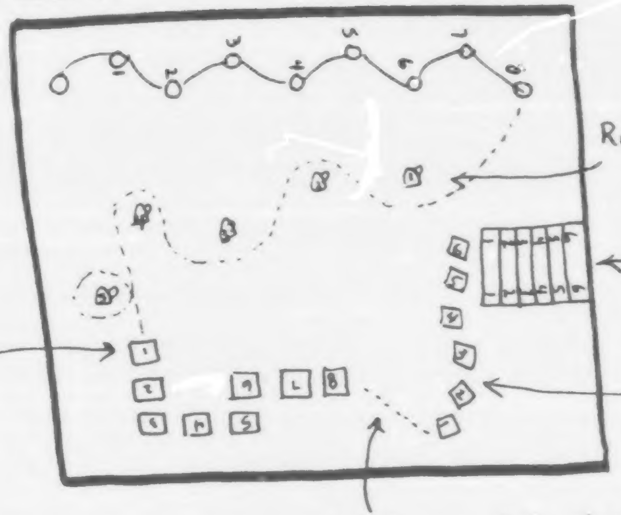
Number Relays Organize two or three teams of the children. Place a basket or box of tennis balls or beanbags at the end of a relay course. Let the first child on each team roll the number cube, run to the end of the relay course, pick up the required number of balls, and run back with them. He tags the next child who then takes her turn. You might place a basket or box at the beginning of the course and let the children carry balls going both directions of the relay. Vary the size of the relay course and the ways children go over it. Sometimes children can hop; sometimes they can walk backwards; sometimes they can jump along the course.

Number Hopscotch Teach the children to play hopscotch being sure that they say each number as they hop on it.

Obstacle Course Set up an obstacle course including a place to walk in "giant steps," run, jump, and hop. Specify some targets (milk cartons) to run to, tag, and say the number of; lay out some numbered pieces of cardboard for the children to jump between as they say the numbers. If you have some steps, number them and let the children walk up and down the steps saying their numbers. Let children run on a curvy path going around milk carton "obstacles" and saying the number of each.

Evaluation: Teacher recorded observation of children's participation--Do children follow directions? Do they say numbers correctly? Do they choose the correct numbers of objects? Are the children skillful in their physical movements?

A Number Obstacle Course



Take 8 giant steps.

Run around the pylons and count them.

Walk up and down the stairs. Say the numbers.

Hop on the numbered squares.

Jump from square to square. Say the numbers.

Count your baby steps to some more squares.

Title: Line Up Game

Objectives: The child will follow directions, use ordinal numbers.

Materials: None

Procedure: As the children line up to go places, take just a minute or two to play the "lineup game." Give the children simple instructions such as "The first person can turn around and wave to everyone else." "The third person should clap her hands." "The last person should come to the front and help to be the leader." Keep the instructions short and active. Let the children give instructions too.

Evaluation: Teacher recorded observation of the children's responses.

Consult Physical Education Section of the resource book for other activities.

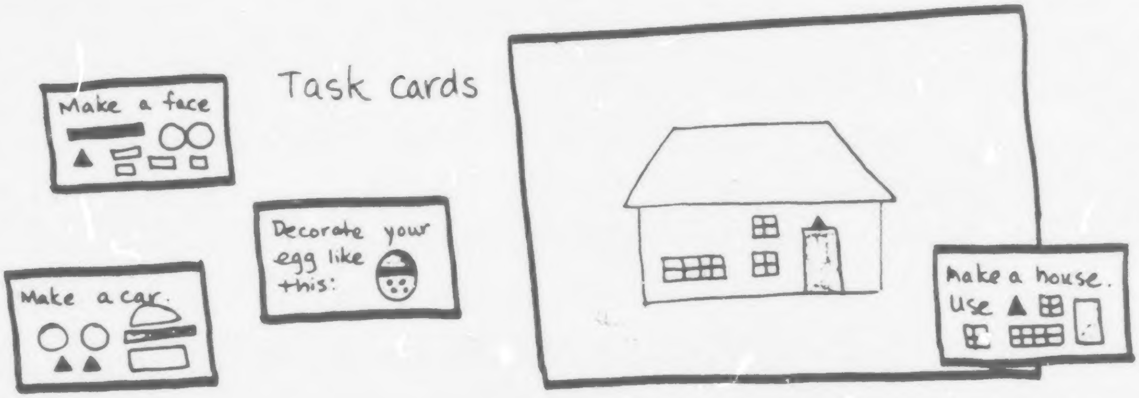
Title: Geometric Designs

Objectives: The child will gain practice working with and naming geometric shapes; color names; will show creativity through choosing and arranging of shapes; practice counting and following directions.

Materials: Large flannel board, felt geometric shapes, task cards written on paper or pellon

Procedure: Vary the geometric designs with the season or the unit you are presenting. Use this geometric design activity as a small group or individual project, or occasionally use it to tell a story for a large group.

Have children arrange colored geometric shapes to form or complete designs such as those that follow. Discuss the names, colors, and numbers of the shapes that are used. Provide task cards (Tasks written on rectangles of pellon adhere easily to a flannel board.) to guide the children. Ask children to tell you about their designs. Ask them to count the various shapes they have used in making their designs.



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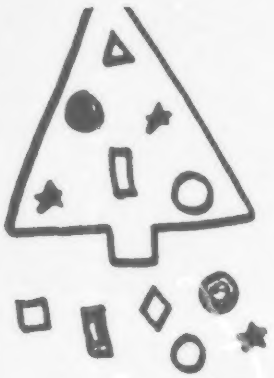
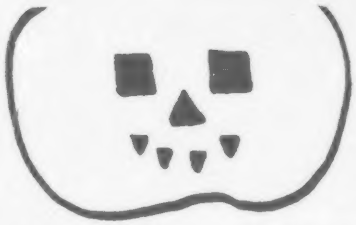
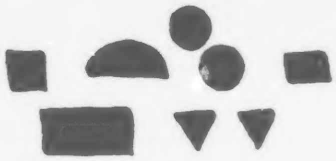
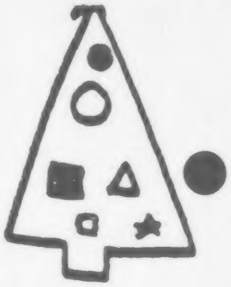








You might use designs such as these:

large pumpkin faces with various geometric shapes cut from dark colored felt to make faces

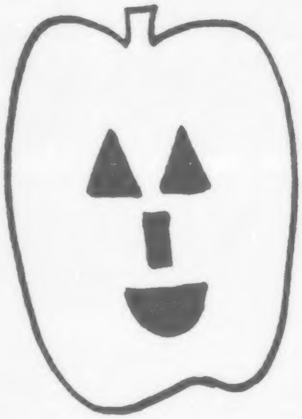
large Easter eggs (or top and bottom halves of eggs) with geometric shapes for decorations

Christmas trees with ornaments of various shapes and colors

shapes for children to arrange to form creatures, vehicles, or animals

various house shapes (or roofs and frames of houses) with other geometric shapes for doors, windows, and chimneys

Task cards might include topics such as those that follow. Help the children to read the task cards and then follow the instructions. Help the children check their work by saying, "Show me how you used the task card to make your design."



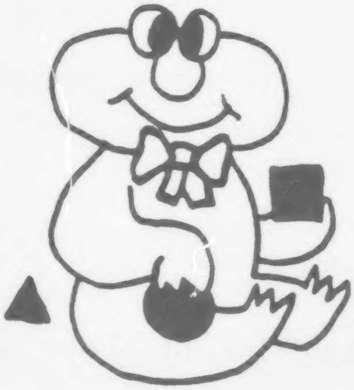
Evaluation: Teacher questioning and recorded observation of children's work (Ask about color, number, and shapes).
Extensions: Use construction paper shapes. Have the children make and discuss designs, then glue them together. Make a bulletin board of the results using a caption such as "See Our Geometric Animals" or "Our Geometric Houses." Discuss each child's work and help him write the names of some shapes he used on the completed design.

Title: Monster Shapes

Objective: The child will gain practice in shape recognition.

Materials: File folder, wallpaper, glue stick, clear contact, manila envelope, pattern for monsters (given in pattern section)

Procedure: Make two monsters from wallpaper using the patterns given in the pattern section. Attach to inside of folder with glue. In each monster's hand, place a shape made from colored paper. Let one monster hold a square and a triangle and the other hold a circle and a rectangle. Cover inside of folder with clear contact. Cut out an assortment of shapes in different colors and sizes from wallpaper. Cover shapes with clear contact. Decorate front of folder and place a manila envelope to back of folder to hold game shapes. Ask the children to sort the shapes by looking at the shape in each monster's hand and finding all the shapes that are the same. Place all the circles in one hand, all the squares in one hand, all the triangles in one hand, and all the rectangles in the other hand.



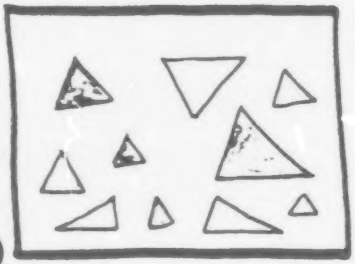
Evaluation: Can the children correctly sort each shape into the proper category? Record observed responses.

Title: Geometry Flannel Boards

Objectives: The child will gain practice working with geometric shapes (circles, squares, triangles, and rectangles) and naming them; practice identifying color names and positional words (above, below, on, to the right, to the left).

Materials: Large flannel board, felt geometric shapes in various colors.

Procedure: Children can use the flannel board and geometric shapes in a large group, small group, and individually. They can arrange the shapes creatively or according to directions given by someone.



"All the triangles"

For a large group activity, give each child several geometric shapes. Let them take turns placing the shapes on the flannel board. You might ask for "all green shapes," then let children name the shapes they place on the board. You might ask one child to name the shape, then ask a third child to name its color. You could also ask for "all triangles" to be placed on the board or "all blue squares" to be arranged in a line.

Vary the activity by using positional words. Ask a child to place a shape above the first shape. You might let another child place a shape on the board and another place a shape wherever he wishes, then describe the location ("My square is to the right of Keesha's square.").

For a small group or individual activity, place the geometric shapes and flannel board on a table or on the rug. Encourage children to sort the shapes, name them, and use positional words to describe their arrangements. You might use pieces of pellon to write "tasks" for children to complete as they work with the geometric shapes.

Evaluation: Teacher recorded observation of the children's responses--Do the children select the correct shapes as they are called for? Can the children name shapes and colors? Can the children follow directions using positional words? Can they make descriptions using positional words?

Title: Geometry Stories

Objectives: The child will gain practice working with geometric shapes (circle, semicircle, square, rectangle, triangle) and naming them; practice identifying color names and size words (large, small).

Materials: Large flannel board, felt geometric shapes to tell stories.

Procedure: Tell a story such as the ones that follow. Emphasize the geometry, color, and comparative names. Add the felt pieces to the flannel board as you go along, or let the children help you. Ask questions about the story to review the vocabulary.

Place the flannel board and felt pieces in a learning center or in your library area. Encourage the children to manipulate the shapes and tell the stories independently. Let the children vary the stories, too.

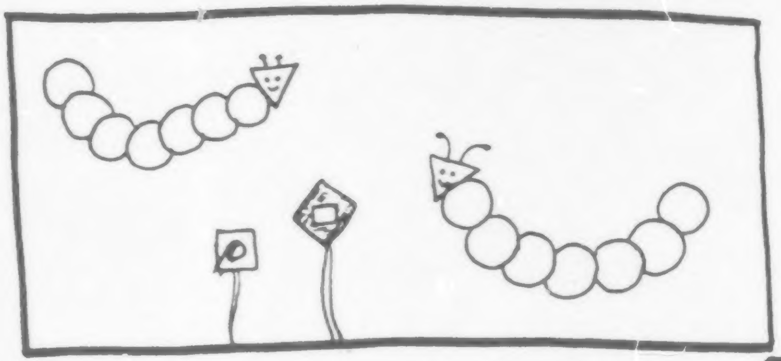
A Caterpillar Story Starter

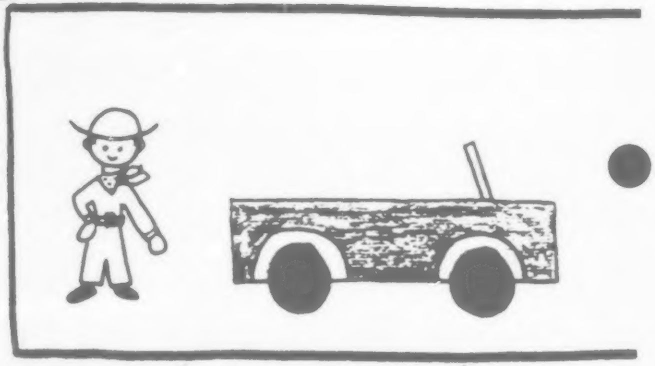
Cathy Caterpillar was green. Her head was a triangle shape. Her body was 7 round circle sections. Let's count them. Cathy crawled along and saw funny flowers. One was a blue square with a smaller blue square in its center. Each flower has a long stem. One day Cathy met another caterpillar. He said his name was Steven. Steven's shape was just like Cathy's except he was orange. Let's make Steven on the flannel board . . . (Continue the story to provide more practice with words and shapes.)

Barney's Car

Barney was so excited about his new car. The car had a long blue body in the shape of a rectangle. Its hubcaps were lighter blue and were semicircles. The car's wheels were red. . . and of course they were circle shapes. The windshield of Barney's car was yellow. Here it is--a little rectangle. One fine day Barney put on his red cap and came out to take a ride in his car . . . (Continue the story.)

Evaluation: Teacher recorded observation of pupil responses--Do children pay attention to the stories? Do they take turns placing shapes on the flannel board? Do the children select the correct shapes as they are discussed?





Title: Geometry Scavenger Hunt I

Objectives: The child will gain practice naming and sorting geometric shapes (large and small triangles, circles, squares, and rectangles).

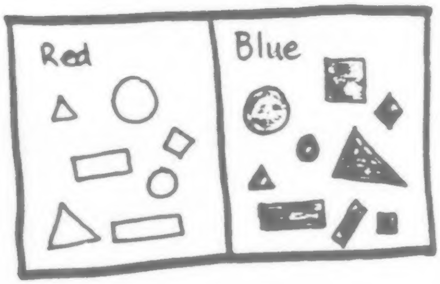
Materials: Approximately 10 small geometric shapes per child; poster board or flannel board

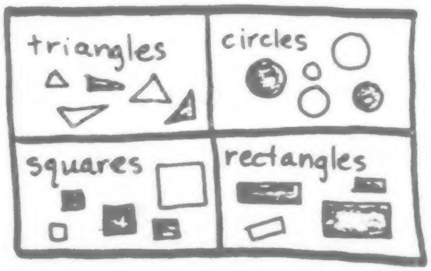
Procedure: It's fun and suspenseful to find and sort little geometric shapes that are hidden like Easter eggs. Hide a large number of paper shapes around the classroom or schoolyard. A small group of children could help you do this. Give the children several minutes to search for the shapes and bring the shapes back to your large group area.

Help the children count the numbers of paper shapes they found. Play the "Show Me" game asking questions such as "Show me any squares you found," "Show me the largest shape you found," or "Show me a triangle (if you have one)." Ask children to hold up the shapes as you ask for them. Quickly check as the shapes are shown. Have the children count their shapes.

Now have the children sort the shapes by placing them in categories on the poster board or flannel board. Divide the board into categories and label each. (If you cover the poster board with clear contact paper, you can write on it with crayon or grease pencil, then later wipe away the writing with a tissue. You could use labels written on rectangles of pellon for the flannel board.) Ask that children lay their shapes in the appropriate category. Form subgroups in each category. For example, you might ask that all triangles and all circles be placed on the board. Then you might sort the triangles into larger and smaller subcategories or you might further sort the triangles in groups of various colors. Let the children suggest other ways to sort the shapes.

Evaluation: Teacher recorded observation of children's responses: Can the children count their shapes? Do they sort the shapes as suggested? Are they eager to participate?





Title: Geometry Scavenger Hunt II

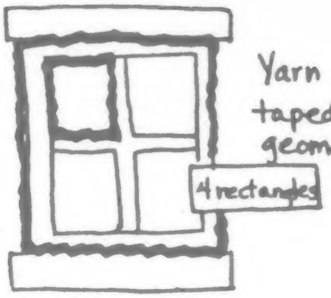
Objectives: The child will identify and name geometric shapes in everyday life.

Materials: Tape, pieces of paper, yarn, scavenger hunt lists and crayons or pencils.

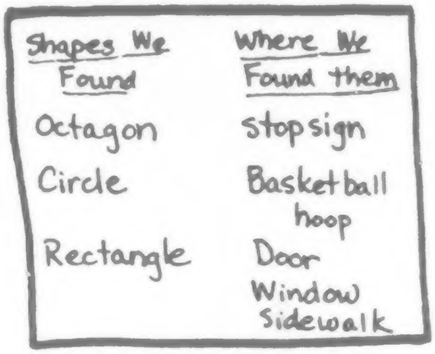
Procedure: Sharpen your pupils' powers of observation with a geometry scavenger hunt. You can conduct the hunt indoors or outdoors. Take your class or a small group on a walk. Provide each child with a scavenger hunt list and crayon. Mark off the various shapes as you see them. Tape signs to some examples of geometric shapes. You might assign individuals or pairs of children to search for certain shapes and point them out as they are found. Tape yarn around the outlines of some shapes. Search for examples such as these:

a large circle
a rectangle found above our heads
two squares found side by side
a triangle
an octagon (a stop sign is a good example)
a rectangle found on the ground
lots of rectangles found side by side
rectangles made of glass
squares made of wood

When you return from your scavenger hunt, write an experience chart about it.

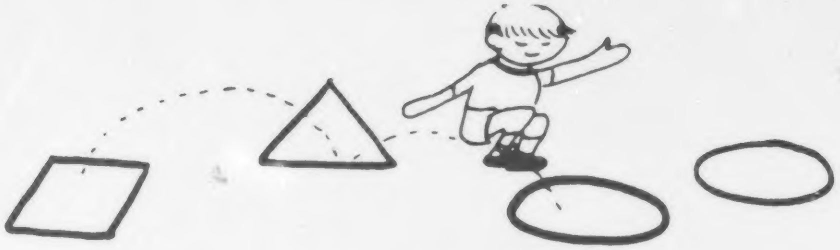


Yarn can be taped around geometric shapes.



Shapes We Found	Where We Found them
Octagon	Stop sign
Circle	Basketball hoop
Rectangle	Door Window Sidewalk

Evaluation: Teacher recorded observation of children's responses--Do children find shapes on the walk? Can they name shapes?



Title: Step-on Shapes

Objectives: The child will gain practice identifying and naming geometric shapes, large motor skills such as running, jumping, and hopping.

Materials: Large geometric shapes cut from cardboard or sturdy canvas

Procedure: This active game has many variations and lets children practice physical skills as well as math vocabulary. It can be played out-of-doors or in a large indoor area.

Teach children how to play various games in which they step on the cardboard or canvas geometric shapes as they go along. Activities they might perform are:

Name each shape as they step on it. Encourage the children to go as fast as possible.

Lay out shapes of two or three colors. Ask children to jump from shapes or just one color. "Jump from one red square to another."

Jump or hop from one shape to another." Jump from a triangle to a square, then another triangle to a square."

Run on one shape, then hop on another shape. "Here's our obstacle course. Run along the squares. When you get to the circles, hop on them."

Encourage the children to invent other active games to play using the geometric shapes.

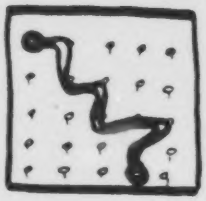
Evaluation: Teacher recorded observation of children's responses and physical skills.

Title: Geoboards

Objectives: The child will be able to use geoboards to develop small muscle skills and hand-eye coordination, to work with geometric shapes, to represent numbers, to copy patterns.

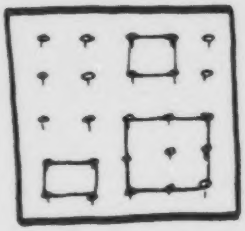
Materials: Geoboards, rubber bands of various colors, container to keep rubber bands, pattern cards, washers or curtain rings.

Procedure: Manipulating rubber bands on a geoboard is fun and can help children to develop attention span as well as small muscle skills. Before working with geoboards, show the children how to handle the rubber bands and return them to a container when they are finished. Then the geoboards will be fresh and clear for the next child's use.



Use the geoboards for activities such as the ones that follow. If you have commercially-made geoboards, the manufacturers will probably suggest many other activities that you will want to try.

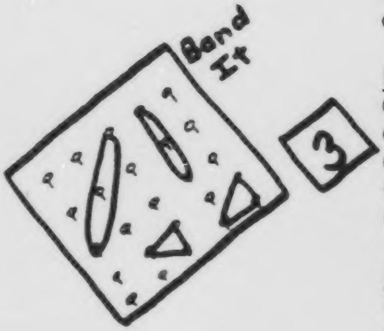
Free Exploration Let each child choose several rubber bands and create any pattern he or she wishes.



Shape Sort Ask the children to use just one rubber band and make a square on the geoboard. Have the children compare their results and place the similar patterns next to each other. Use other shapes such as rectangles, triangles, and zigzags.

Copy Cats Create a geoboard pattern with several shapes and colors. Have the children duplicate the pattern.

Band It Name a number such as three and ask the children to encircle three nails on their geoboards with a rubber band. Vary the numbers. Compare answers. Some numbers can be done various ways. Let the children name numbers for the others to use.



Here To There Have a child put washers over two nails of his or her geoboard. Let each child in the group place washers over nails in the same positions. Now let the children use one or more rubber bands to connect the two nails with washers. Compare and describe all the different paths that might be used to connect the two nails.

Big Bigger Biggest Specify a shape such as square. Have each child outline a square, a bigger square, and a biggest square on his or her geoboard. Let the children show and discuss their results.

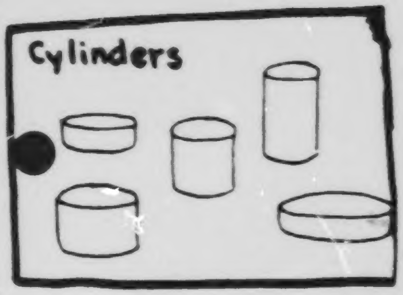
Evaluation: Teacher recorded observation of children's responses.

Title: Three-Dimensional Collage

Objectives: The child will gain practice in sorting and classifying; manipulating three-dimensional geometric shapes.

Materials: Collection of small boxes, cans, and containers of various shapes, large piece of paper, glue

Procedure: This activity encourages children to handle and examine three-dimensional geometric shapes. Show the children a can (a cylinder) and small box (a rectangular prism) and talk about similarities and differences in them. Make sure the children notice that the top and bottom of the cylinders are circles



while the faces (surfaces) of the prisms are rectangles (or squares). You might find a few boxes such as light bulb boxes that have hexagonal bases (tops and bottoms) while the other faces are rectangles.

Have the children sort the containers into two categories: cylinders and prisms. Have them pile up the containers or glue them in place to make a unique three-dimensional collage.

Evaluation: Teacher recorded observation of children's responses--Do children offer suggestions in the discussions of similarities and differences? Do they sort the containers successfully? Extensions: Set up a store in the housekeeping area featuring boxes and cans of various sizes. Have children put the containers in order--largest to smallest or smallest volume to largest. Carefully remove the lids from some containers. Have the children fill the containers with rice or styrofoam pieces. Encourage the children to predict which containers will hold the most, then compare their results.

Title: Linear Measuring By the Foot (Print)

Objective: The child will be able to establish a "personal" unit for linear measuring.

Materials: 9" x 12" construction paper (one per child), scissors (one per child), pencil or crayon (one per child)

Procedure: Distribute the paper to the children along with scissors and pencils or crayons. Instruct them to place their papers on the floor and then place their shoes on the paper. Have them trace the outline of their shoes on the paper and then cut out the footprint. Discuss with the children the measuring unit called a foot. Exhibit a 12-inch ruler. Be sure to point out that each child's foot measure is different from a foot ruler. Ask the children to use their foot rulers and measure a table, etc. Point out that all will not get the same number of feet because all their footprints vary in length. Give the child an assignment after you have measured things in the classroom. Sample assignment: Determine how many feet long a table is at your house.

Evaluation: Does the child use his foot measure as instructed by the teacher? Record observations as made.

Title: Linear Measuring By the Foot (ruler)

Objective: The child will be able to demonstrate knowledge concerning standards of measure.

Materials: Construction paper strips (12" x 1") one per child, 12-inch ruler

Procedure: Distribute the 12-inch strips to the children. Demonstrate to the children that their twelve-inch strips are the same length as the teacher's 12-inch ruler. With your ruler, measure the length of your desk or table. Then with a 12-inch paper strip measure the same desk or table. Verbalize to the children, "My desk is eight feet long," or "Your table is four feet long." Assist children in measuring objects about the room such as a door, a window, an easel, and so on.

Evaluation: Does the child know that a unit of measure, a foot, is used as a standard measure? Can the child correctly measure objects? Record observed responses.

Title: Longer and Shorter Hunt

Objectives: The child will be able to find objects that are longer and shorter than a given distance, to order objects by length

Materials: Strips of paper cut in 10 cm (4 in.) 20 cm (8 in.), and 30 cm (12 in.) sizes, objects from the classroom.

Procedure: Work in a large group. Show the children some objects that are longer and shorter than a 10 cm strip of paper. For instance, most books will be larger (or taller) than the 10 cm strip and a used crayon will be shorter than the strip. Give four or five children strips of paper. Let the children leave the group and return with objects that are longer and shorter than their strips of paper. Dismiss another group to find longer and shorter objects. Lay out the objects that were found, discuss their lengths, and put them in order. Continue the process until each child has had an opportunity to bring a longer and shorter object to the group. Let the children take turns returning their objects to their correct places. You might play a classification game as you return the objects. For example, you might let the children return all the red objects first, all the books second, all the toys third, and so on.

Evaluation: Teacher recorded observation of children's responses.

Title: Weight Sequencing

Objective: The child will be able to demonstrate a knowledge of greater of lesser weight.

Materials: Four empty potato chip cans, sand, tape, patterned contact paper or paint

Procedure: Fill one can completely full of sand, fill one 2/3 full, fill one can 1/3 full, and leave the fourth can empty. Tape the lids on securely. Cover cans with contact paper or paint them. Instruct children to find the lightest can first (empty one) then the next lightest and so on.

Remember the lids on the cans are translucent and should be covered or painted. This activity can be self-checking if you number the cans according to weight on the bottom of the cans.

When the children can sequence four different weights easily, add four more cans with varying amounts of sand.

Evaluation: Can the children arrange the cans according to their weights? Record observations made.

Title: What's the Temperature?

Objectives: The child will demonstrate an awareness of measurement of temperature, record data over a period of time, provide experiences in reading a thermometer.

Materials: One or two air thermometers, cooking thermometer, large felt or cardboard thermometer with movable "mercury", calendar, forms for temperature graph, catalog or newspaper, glue, paper.

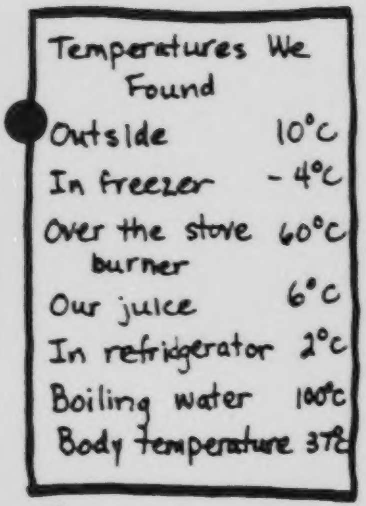
Procedure: This activity should be conducted over a period of several days with one or two days used to make pictures of various temperatures.

Talk to the children about hot and cold temperatures and let them give examples of the ways that changes in temperature affect their activities and dress. Talk about appliances that let people change the temperature of their surroundings--furnaces, stoves, ovens, air conditioners, refrigerators, and so on.

Each day have two or three children help you read a thermometer. Take temperatures indoors and outdoors or in the morning and in the afternoon. Let the children report their results to the class and mark the temperature on graphs and on the class calendar. Help the children set the correct "mercury" level on a large model of a thermometer to show various temperatures.

Have children cut pictures from newspapers and magazines and make booklets or collages to illustrate various temperatures. They might show "hot," "moderate," and "cold" places, activities, and clothing. Encourage the children to talk about what they like about changes in weather and activities appropriate for different temperatures.

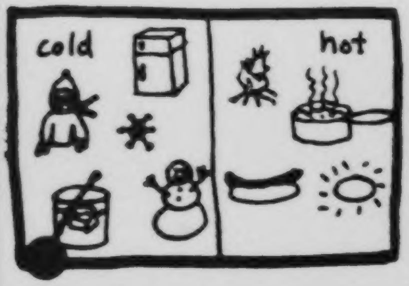
Over a period of several days, let children take turns helping you determine the temperature in various places such as boiling water, tap water, inside the refrigerator, inside the freezer, in cold water, beside the radiator, and so on. Make a chart of your results. Let the children help you point out the hottest and coldest temperatures they found.



Temperatures We Found

Outside	10°c
In freezer	- 4°c
Over the stove burner	60°c
Our juice	6°c
In refridgerator	2°c
Boiling water	100°c
Body temperature	37°

Experience Chart



Our temperature collage

Daily Temperatures

Extension: Keep a temperature chart for two weeks at another time of the year. If you kept your first chart in November, for example, do another chart in April.

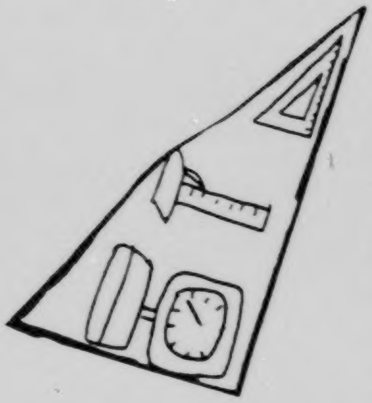
Evaluation: Teacher recorded observation of the children's work--Do they need help to read the thermometers? Do they distinguish hot and cold? Do they help to make the graphs?

Title: Measuring Tool Collage

Objective: The child will explore the many tools used for measuring, expand vocabulary by learning names of some measuring tools, and engage in sorting tools according to their purpose.

Materials: Collection of measuring tools such as thermometers, clocks, rulers, measuring tapes, measuring cups, and scales; catalogs and newspapers, paper, glue

Procedure: Show children the measuring tools and encourage them to discuss the purposes of each and their experiences with measuring tools. Make an experience chart letting children name tools used to measure temperature, time, length, volume, and weight (mass).



Have the children look through catalogs and newspapers to find pictures of measuring tools. Name the pictures. Sort them and make a group collage by gluing the pictures in their appropriate categories to a large paper. After the collage is finished, let the children take turns telling about pictures in the collage that have special interest for them.
Variation: Over a period of two or thee days, have children compile individual booklets of pictures of measuring tools. Children can also draw pictures of people using measuring tools.

Evaluation: Teacher recorded observation of children's abilities to sort tools into appropriate categories and to name tools.

Title: A "Me" Book

Objectives: The child will record various personal measurements about him/herself; gain experience in using measuring tools (rulers, tapes, and scales).

Materials: Measuring tapes, scales, rulers, mirror, ball, 100 feet nylon cord or clothesline, paper, marker, pattern of ME pages found in pattern section.

Procedure: As children make "Me" books, they have experiences with several kinds of measuring tools as well as practice recording data. "Me" books are individualized and personal, so children are proud when they are completed and can be taken home. Plan to work with groups of children on their "Me" books in at least three sessions--one to measure and record data for the first two pages, a second session to complete the third page, and an outdoor session to do the fourth page.

Duplicate the booklets that appear in the pattern section. They are nicest if reproduced on both sides of a sheet of paper. Help the children fold the books in half to form a front page, two inside pages, and a back page. Help each child write his or her name on the front and add a face and hair to the drawing. Work with a few children at a time to measure heights, get weights, and fill in their ages.

For the second page, set up a measuring tape horizontal, about 8 meters (30 inches) from the floor. Have the children take turns stretching out their arms and measuring their reaches. Help each to compare his or her height and reach; their measurements will probably be very close. Help each child measure the length of his/her foot and record it in the book. Have each child look in the mirror, measure, and then record the length of his/her "serious" mouth and wide grin. Let the children fill in and color the faces on the second page.

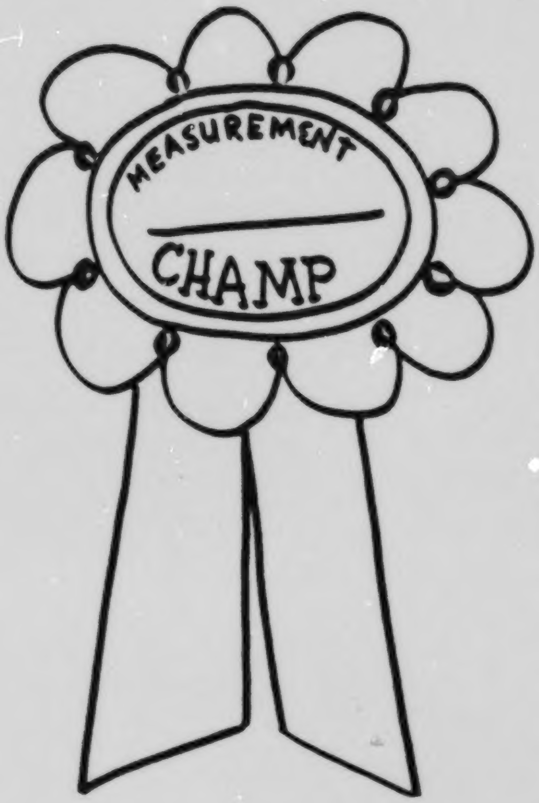
Evaluation: Teacher observation of children as task is completed.

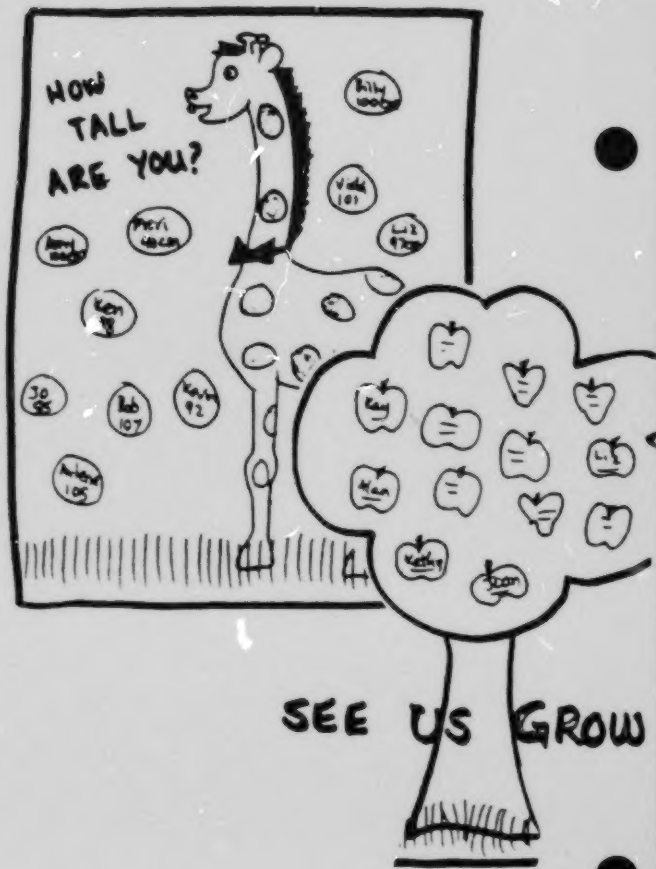
To complete the third page, have each child trace his/her hand. Help her to measure its length and width and record the measurements. When the children are finished, help them make comparative statements about some of their body parts. You might ask "Which is longer--your hand or your foot?" "Which is shorter--around your middle or around your neck?" You might also discuss places people measure and the tools they use suggesting that people measure to know their shoe size using a specially-marked tool or that people might want to know the dimensions of a room to buy a new rug.

Finally, complete the "Me" book with an active, outdoor session. Work with the children a few at a time to see how far they can broad jump, giant step, and the time it takes each to complete a 30 meter (or 100 foot) dash. You might give each child who completes the activity a paper "ribbon" prize as shown below. Let each child take their "Me" book home.

Evaluation: Teacher observation of children's participation and completion of books; teacher observation of children's understanding of discussion of comparison and measuring tools.

Extensions: Make a chart of the children's heights and weights. Help the children read the chart and find each other's names and measurements. Pick out the tallest height or smallest weight. Ask questions like "Whose height is the same as Billy's?" or "Who weighs the same as Lesley?" You might want to record the children's heights and weights in September, in January, and in May. Most will exhibit measurable growth. You could record the children's heights on a display such as the ones shown below.





Title:	Balancing Act
Objectives:	The child will gain practice working with a balance scale, practice counting objectives, recording data, identifying heavier and lighter weights on a balance scale.
Materials:	Simple balance scale, paper or laminated chart to record results, crayons, or markers, small objects such as paper clips, large beans, plastic counters, blocks, styrofoam or sponge pieces.
Procedure:	Display a chart with several statements that say "__________ balances __________." Work with a small group. Show them how the balance scale tips toward the heavier of two weights and how it balances with equal weights. Let the children experiment, placing various objects on the balance scale and making it balance. Count some of the combinations of objects that make the scale balance. Record the information using numerals and words or pictures or help the children to record it. You might find that 6 paper clips balance 14 styrofoam pieces or that it takes 19 plastic counters to balance a large block.
Evaluation:	Teacher recorded observation of children's participation--How well do they count the objects? Can they help in recording data? Do the children reorganize the heavier and lighter weights on the scale? Can the children work with the scale to make it balance?

Title: Bead Addition

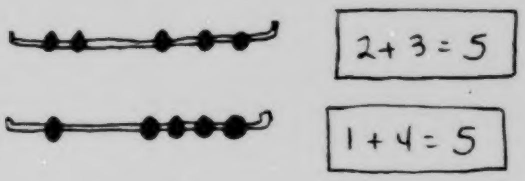
Objectives: The child will gain practice counting and adding.

Materials: Beads on pipe cleaners and/or cards, number sentence cards or crayons and paper

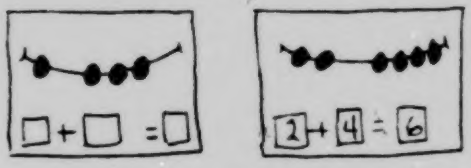
Procedure: Beads are easy for children to manipulate as they arrange the the beads to represent various addition situations. Prepare bead counters as shown. Let the children arrange the beads in various combinations such as 1+3, 2+2, 3+1, or 0+4 and 4+0. Help the children to record some of the combinations. Talk with the children about the fact that there are many ways to get a sum or total of four. Sums involving zero are not easy; introduce them slowly and carefully.
Variation: Have the children make two sets of the available beads and point out whether the two sets are equal or not.

Evaluation: Teacher recorded observation of the children's work--Do the children make several combinations for each sum? Can the children count the beads correctly? Can children record or help to record some of the combinations?

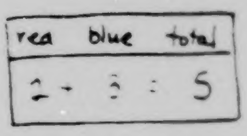
Beads on a pipecleaner

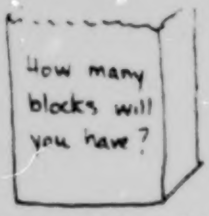


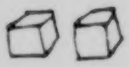
Beads strung across a laminated card. Children can write the number sentence on the card.



Knot the string on the back of the card.




How many blocks will you have?



Title: Blocks "Grab Bag"

Objectives: The child will practice combining sets for addition situations, practice counting, record numerals and sums.

Materials: Paper or cloth sack, blocks of two colors, paper and crayons or number sentence cards.

Procedure: The "grab bag" provides an element of suspense for more concrete practice with adding and making number sentences. Place several blocks of two different colors in a paper or cloth bag. Let a group of children take turns pulling out a handful of blocks, counting the colors (reds and blues for example), then finding the total number of blocks and recording the appropriate number sentence.

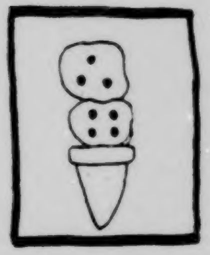
Evaluation: Teacher recorded observation of children's work--Do the children count the blocks successfully? Can they find and record the total?

Title: Ice Cream Cones

Objectives: The child will gain practice counting, joining sets, and addition.

Materials: Ice cream cone cutouts made of paper, felt or pellon, flannelboard, number sentence cards.

Procedure: Children like to pile up scoops of ice cream, even when it's only a pretend situation! Working with the ice cream cone activity lets children work with addition concepts in a concrete way. Let the children choose 2 colors (flavors) of ice cream and pile them up on a cone. Then encourage the children to count and talk about the total number of scoops. For example, "Two chocolate scoops and three strawberry scoops ... five scoops in all." Let children write number sentences for some of the situations they picture and discuss. Show them how to fill in numerals and complete the sentences on cards such as those shown below. Reinforce counting the total number of scoops as an appropriate way of getting the sum. Ice cream cone patterns are included in the pattern section.



Teacher makes card with + and = signs.

+ =

Evaluation: Teacher recorded observation of children's work--Do children seem to realize that combining "scoops" makes a total? Can children count the scoops or numbers of chips in the scoops correctly? Can children write the correct numerals on the number sentence cards?

Also present cards with vertical form of addition problems.

Child fills in numerals to complete the sentence.

2+3=5

Title: The Hanger Game

Objectives: The child will demonstrate an understanding of addition and the commutative property of addition; increase small motor skills through handling of clothespins; read and represent numerals.

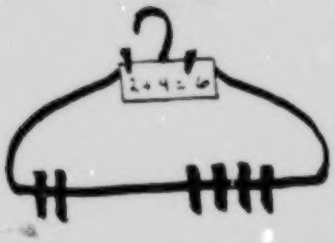
Materials: Wire or thin plastic coat hangers, clothespins, number cards.

Procedures: This versatile activity features work with easy-to-use clothespins and lets children use many math skills as they have experiences in dealing with addition. Make number sentence cards to clip or hang onto the tops of coat hangers. Have the children clip on the appropriate numbers of clothespins, count to find the sum, then write the sum. Now have the children turn the coathanger around and see a different arrangement of clothespins with the same sum. Write the number sentence for the second arrangement. Also have the children to arrange clothespins, then write number sentences.

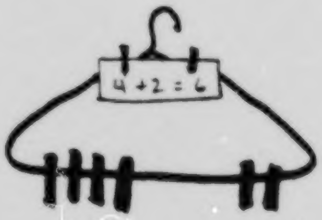
Evaluation: Teacher recorded observation of children's work--How well do they read and write numerals? Do they understand the idea that the sum is the total number of clothespins?

Version 1

Teacher writes the problem. Children arrange the clothespins and write the answer.

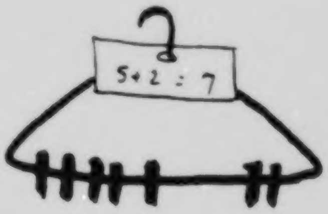


Next rotate the hanger. Children write both the problem and answer.



Version 2

Children arrange the clothespins first, then write the problem and answer.



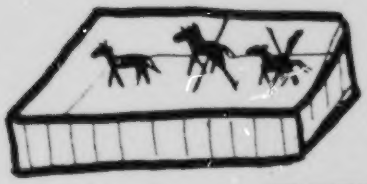
Title: Animal Comparisons

Objectives: The child will compare numbers of models, illustrate subtraction in a correct way, record comparisons and make subtraction sentences.

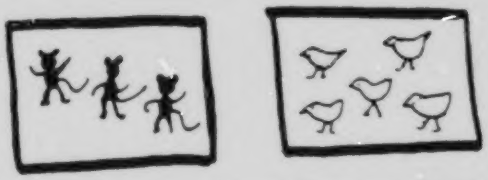
Materials: Small farm or zoo animal models, paper or plastic "pens", paper and markers for the teacher.

Procedure: Work with animals presents subtraction in two ways--the familiar "take away" version and the use of subtraction for comparison (seeing if one set has more members than another set). Let the children group the animals in pens. They may make a set of all the horses and all the cows, or sets of wild and tame animals. Have the children count the members of a set, take away some animals, then count the number that are left. Record the children's work. You could use both of the suggestions pictured below. Next have the children compare sets: Are there more horses than cows? How many? Record some of the children's responses. Have the children suggest and carry out several "take away" and comparison situations with the animals.

Evaluation: Teacher recorded observation of the children's responses--Can they group the animals? Can they count and compare the sets as you work with them? Do the children pay attention as you record their results?



Models



3 horses.
Take away 2.
1 is left.

3 horses
− 2 horses
1 horse

Recording

3 Monkeys 5 Birds
There are 2 more birds than monkeys.

Recording

Title: Take-Away Task Cards

Objectives: The child will follow directions, read numerals and instructions, subtract objects, record results.

Materials: Counters, take-away task cards

Procedure: This activity should follow many other experiences with recording answers, writing numerals, and taking away counters. Let the children choose task cards, do the work, and record results. Ask the children to show you how they got some of their answers.

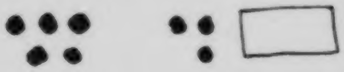
Evaluation: Teacher recorded observation of children's work--Do they follow written directions? Do they remove the correct number of counters?
Do they record results accurately and legibly? Can the children talk about their results when asked "Show and tell me what you did."?

Start with 5.
Hide 2.
How many are left? ☐

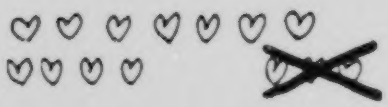
Choose 7.
Take away 3.
How many are left? ☐

Make a set of 4.
Take 3 away.
How many are left? ☐

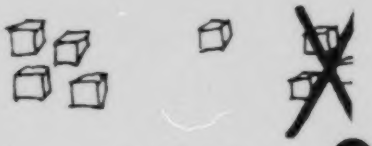
Work with counters:



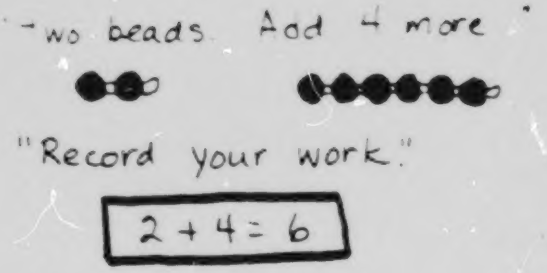
2 are left.

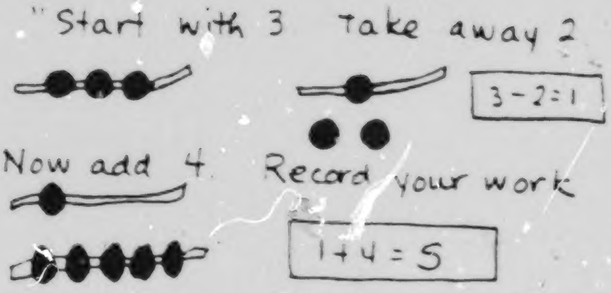


4 are left.



1 is left.





Title: Pop and Unpop

Objectives: The child will gain practice in addition and subtraction in a concrete form, counting and comparing sets, recording information.

Materials: Pop beads or beads on pipe cleaners, laminated number sentence cards, crayons.

Procedure: Children can easily and quickly add and subtract from bead strings for another experience with addition and subtraction. Be sure to have the children both talk about and record their data for their work with beads. Let children pop and unpop beads or add and subtract beads on pipe cleaners in a short period of free exploration. Now give some instructions such as "Start with 6 beads. Add 2. How many do you have now? Let's write it down." or "Make a string of 4 beads, take away 3. Count your beads. Let's record it. Now add 5 beads. Let's make another number sentence." Vary the activity by asking children to first record a number sentence, then show the work with their beads.

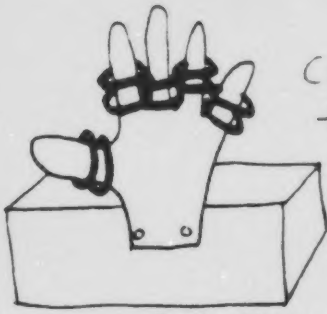
Evaluation: Teacher recorded observation of the children's work--How well do they follow directions? Can they tell the answers? Can they record their work accurately and with well-formed numerals?

Title: Rings 'n' Fingers

Objectives: The child will gain practice in counting, one-to-one and many-to-one matching, practice in small motor skills of putting rings onto cardboard fingers.

Materials: Hand cutouts attached to a board (Hand patterns are in the pattern section.), 30-50 brass curtain rings or plastic play rings paper and pencil for the teacher.

Procedure: The fingers in this game get mighty fancy with jewlery! Matching rings and fingers lets children practice one-to-one correspondence and counting. When each finger gets more than one ring, a multiplication situation is informally introduced. Prepare the hand cutouts. Use one or both hands depending on the children's counting abilities. Let the children place one ring on each finger, then count the total numbers of rings and fingers. Then let the children decide how many rings and fingers it might take to put two or three rings on each finger. Let them do the matching and counting. Help the children make



Cardboard hand is securely tacked to a wood block.

Five fingers with two rings each. Ten rings in all"

some oral and written number sentences such as "ten fingers; 3 rings each; 30 rings in all" and "10 x 3 = 30." The children will also enjoy placing rings on their own fingers and counting the total.

Evaluation: Teacher recorded observation of children's responses--Can the children match fingers and rings one-to-one or many-to-one? Can they count the numbers of rings and fingers successfully? Can the children help to make number sentences orally and in writing?

$\boxed{5 \times 2 = 10}$

Title: Bears That Love Hamburgers

Objectives: The child will gain practice in working with many-to-one correspondence (a multiplication situation), counting objects, making sets.

Materials: Bear and hamburger cutouts made of paper or pellon (Make at least 6 bears and 30 hamburgers.), tabletop or flannelboard. (Pattern given in Pattern Section.)

Procedure: These hungry bears love hamburgers! This activity introduces multiplication in an easy, attractive format while it reinforces counting and matching skills. You can vary the activity using other creatures and foods. Tell a little story about some bears (perhaps 4 bears) and all the hamburgers each could eat. Describe the fact that the bears wanted to share hamburgers evenly so each bear had the same number. Let children arrange the hamburger cutouts so each bear has the same number (perhaps 3 hamburgers for each bear). Let the children count to be sure each bear has the same number. Then count the total number. Help the children make a statement such as "Four bears with 3 hamburgers each ... 12 hamburgers in all." Start at the beginning again with a different number of bears and hamburgers. Patterns are included in the pattern section.

Evaluation: Teacher recorded observation of the children's work--Do children count the bears and hamburgers correctly? Can the children distribute the hamburgers evenly, making equal sets?

Title: Arrays

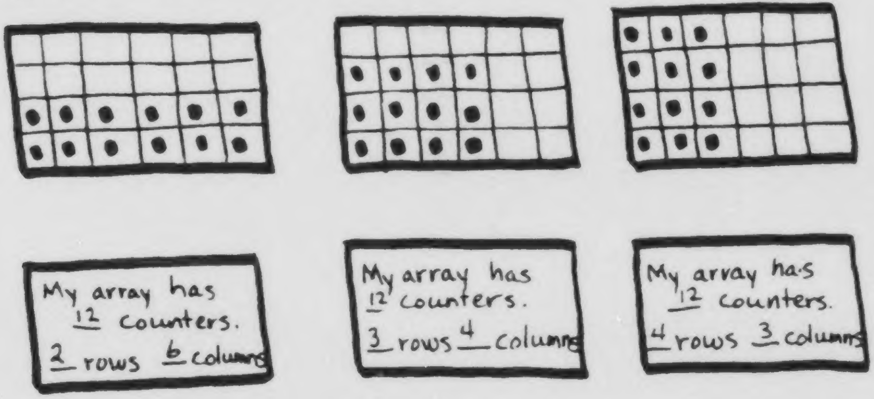
Objectives: The child will count objects, arrange objects in a variety of patterns, present a model of multiplication.

Materials: Grid paper (in pattern section), beans or small counters, number sentence cards, crayons.

Procedure: This activity is an informal experience with making arrays--rectangular arrangements of objects. Arrays are common models for multiplication in the primary grades. Kindergarten work with arrays should be kept very concrete and casual. Give each child a piece of grid paper and many counters. Specify a number (Use 8, 9, 10, 12, 15, 20, or 24) and ask the children to set aside that number of counters. Show the children how to arrange their counters, one per square on the grid paper, to make a rectangular array. Stress the idea that the array should be "even" or rectangular with no counters "sticking out." Count the counters. Show the children how to count the rows and columns of their array as suggested in the illustration. Help the children to fill in the number sentence to tell about their array. Now, with the same number of counters, try to rearrange the counters into a different array and record the results. Some numbers such as 8 or 20 will have several different patterns (8 by 1, 1 by 8, 2 by 4, 4 by 2; 4 by 5, 5 by 4, 2 by 10, 10 by 2, and even 1 by 20 and 20 by 1).

Evaluation: Teacher recorded observation of the children's work--Do they count the appropriate number of objects? Can they count the objects in the rows and columns? Can the children help to record information about the arrays they make?

Work with 12 counters and arrays:



My array has 12 counters.
2 rows 6 columns

My array has 12 counters.
3 rows 4 columns

My array has 12 counters.
4 rows 3 columns

Some possible arrays of counters.

Recording of the work.

Title: Hidden Pennies

Objective: The child will gain practice counting, work problems with sums and addends, increase visual memory.

Materials: Pennies or other small objects, small box or piece of paper.

Procedure: How many pennies are missing? This question intrigues children and helps to increase their understanding of addition and subtraction. Show the children some pennies and let them count the pennies. Now ask the children to close their eyes. Hide some of the pennies under your hand or a piece of paper. Ask the children how many pennies are missing. Encourage them to count the pennies they see, then continue to count to the total number, keeping track of how many are missing. Let the children take turns hiding pennies. Vary the activity by using other small objects or cutouts.

Evaluation: Teacher recorded observation of the children's counting, problem solving skills, and attention span

Title: Count Down

Objectives: The child will gain practice reading numerals and moving the appropriate number of counters; work with addition and subtraction in a concrete way.

Materials: Counters or small blocks, a number die with 0-3 on its surface.

Procedure: This exercise lets children read numerals, count, and practice adding and subtracting in a game they can learn to play independently. Show a group of three to five children how to play the "count down" game. Each child starts with ten blocks or counters. A pile of about 20 blocks is placed in the center. The children take turns throwing the number die and taking away the appropriate number counters (placing them in the middle) until each has no blocks left. Then the children take turns adding the number of blocks shown on the number die (when thrown) until each reaches ten.

Evaluation: Teacher recorded observation of children's responses--Do they take turns? Do they count the number shown on the die and add or subtract the appropriate numbers from their piles of counters?

Title: Dividing

Objectives: The child will be able to divide objects among a group of students, to count and share objects, to make equal sets.

Materials: Simple materials as described in procedure

Procedure: Use real objects to distribute among the children. Let a child or two pass the objects out one at a time. Specify that each person must have the same number saying "because that's how to divide something equally." If you have some objects left over, call them the "leftovers" or "remainder." Once objects are distributed, have each child count his or her objects to be sure that everyone has the same number. Try to use the dividing situation many different times. You will divide and distribute objects such as these:

crayons for an art activity
cookies or crackers when each child is to have more than one
large seeds to be planted by individuals
peanuts to be shelled and eaten
cards before a card game is played
counters for a subsequent math activity

Sometimes you may want to write a sentence or math notation for the children to record what has happened. Your recording might read "We had 36 peanuts and 5 children. Each child got 7 peanuts and 1 peanut was left over" or "48 crayons, 8 children. Each gets 6 crayons.

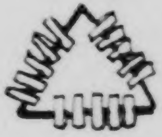
Evaluation: Teacher recorded observation of children's work--Do they understand the idea of passing out objects "evenly" or "equally? Do they count the objects they are given successfully?

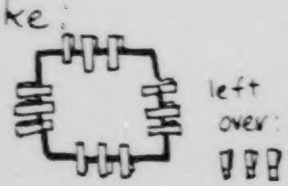
Title: Clothespin Clipons

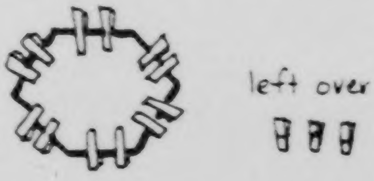
Objectives: The child will be able to divide objects into equal sets, to count, to increase small motor control by working with clothespins, to handle geometric shapes.

Materials: Geometric shapes cut from cardboard, 40-50 clothespins, bowl or box for the clothespins.

Handfuls of clothespins are evenly divided among the sides of the geometric shape. If a child started with 15 clothespins, the result might look like:







Procedure: Here's yet another math experience using those handy clipons that children love to work with--clothespins! Prepare geometric shapes with sides of equal lengths (square, equilateral triangle, regular hexagon, regular octagon). Let the children work in small groups. Each child can choose a geometric shape and take a handful of clothespins. He or she should pin an equal number of clothespins on each side of the geometric shape. Any leftover clothespins can be put back in the box. Ask the children to show you how many sets they made and to count the clothespins in each set.

Evaluation: Teacher recorded observation of children's work--Do they make equal sets? Can they count the clothespins in each set?

Title: Sharing Games

Objective: The child will gain practice dividing objects evenly, opportunities to model the idea of sharing, opportunities for counting.

Materials: Game materials as described (Some patterns are in the pattern section.), child-drawn pictures of people and houses or catalog pictures

Procedure: Let the children lay out the game characters and try to distribute the other materials evenly. They should count the distributed materials to be sure they have made equal sets. Any leftover materials can be placed in a box and called the remainders. You might use games such as the following or let the children make other suggestions.

Dogs and Bones Pass paper bones out to each of several dogs.

Dolls and Bows Children place bows on doll's heads. Use lots of bows!

Houses and People Use 4 to 10 houses and many pictures of people. Distribute the people evenly in the houses.

Cups and Sand Work outdoors with a big bucket of sand (or water). Let 4 or 5 children use cups and take turns emptying the bucket one cup at a time. They can count the cups as they remove sand (or water) from the bucket.

Evaluation: Teacher recorded observations of children's work--Do they distribute the characters and objects evenly? Do they count the numbers of each set to be sure that the sets are equal?

Title: Divide and Glue

Objectives: The child will be able to divide objects into equal sets; to refine hand-eye coordination by making an art project.

Materials: Toothpicks, small pieces of dark-colored construction paper, glue.

Procedure: Divide up toothpicks (evenly of course!), then make some mini art projects. Give each child 20 to 30 toothpicks and 3 or 4 small (10 x 10 cm or 4 by 4 inches) pieces of paper. Let each child divide the toothpicks evenly among the pieces of paper. If any toothpicks remain, the child can discard them or give them to a classmate. Ask the children to count each set of toothpicks to see that the sets are equal. Then let the children glue the toothpicks to make designs on each piece of paper. Challenge them to make each design different. Help the children label their little designs with their names and the number of toothpicks.

Evaluation: Teacher recorded observation of children's work--Do they make equal sets? Can the children count the toothpicks in each set? Do the children complete each little design?

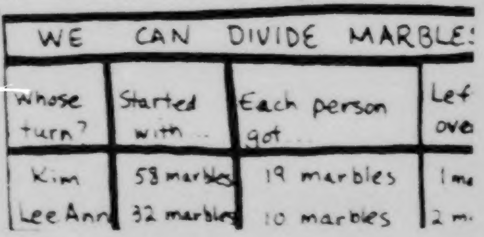
Title: "Split Up" The Marbles

Objectives: The child will be able to divide marbles evenly among several children, to practice counting, to make equal sets.

Materials: 50-100 marbles, 2 large bowls, several styrofoam trays or smaller bowls, paper and marker

Procedure: Children like to play with marbles. Capitalize on their interest with another dividing activity. Let children take turns being the leader. The leader takes a big handful of marbles from one large bowl and puts them into another large bowl. (This will enable the group to use a different number of marbles each time.) He or she then distributes the marbles evenly to each other child in a small group. Any remainders are left in the large bowl. Then a new leader dumps all the marbles back and begins over. You might help the children record the starting number, number in the group, and number of marbles each received.

Evaluation: Teacher recorded observation of the children's work--Do the children take turns? Can they distribute the marbles evenly? Do they count their marbles accurately?



WE CAN DIVIDE MARBLE

Whose turn?	Started with ...	Each person got ...	Lef ove
Kim	58 marbles	19 marbles	1 m
Lee Ann	32 marbles	10 marbles	2 m

Title: Graphing Fun

Objectives: The child will be able to make and interpret graphs, to count and compare sets, to categorize or classify data.

Materials: Paper, crayons, glue, other materials to make graphs as described below

Procedure: Making graphs is interesting to children when the data represented is about them. Working with graphs provides experiences to bridge the gap between real experiences and opinion and the more abstract graphic forms of showing data. In addition, children practice many number skills when they work with graphs.

Have the children make a graph as suggested below. Help the children interpret the graph by activities such as picking out the largest or smallest categories, naming the categories, finding the total number of participants, finding categories with equal numbers, or counting the numbers in each category. You may wish to include categories that no one will choose; of course these categories will let you use the number zero. Suggested below are several graph formats and topics. Vary them to suit your needs, and interests, and topics you are studying.

Felt Face Graphs These easy-to-make graphs are reusable. Cut a felt circle to represent each child's face. Draw features on the circles or let the children do it. You might also want to add yarn hair to the faces. Let the children arrange the faces in categories on a flannel board. If you print the graph categories and titles on pieces of pellon, they will be easy to arrange and reuse. As you interpret the graph, let the children move the felt faces as they count them. This encourages rational counting. Some topics you could use for a felt graph are:

"Number of People in My Family" Use categories from 2 to more than 7.

"How I Got to School" Use categories such as walk, ride in car, ride in bus, ride on bicycle, etc.

"My Favorite Book From This Week" Display titles of books you have read during the week.

"Color of My Socks" Use sock shaped marker for categories.

Clothespin Graph Because they have only two categories, clothespin graphs make a good introduction to graphing activities. The graph forms are easy to make, so you can use them often. Marking and interpreting a clothespin graph makes a good brief large group activity.

Use half a piece of construction paper or a piece of poster board about 12 x 30 cm ($4\frac{1}{2}$ x 12 in.) Write a title on it and label it along the sides for two categories. Help each child write his or her name on a clothespin using permanent marker. Present a clothespin graph and let the children mark it. Count and compare the clothespins in each category. Try some clothespin graph topics like these:

"Do You Have a Pet?" Label the categories yes or no.

"I'm A ... Boy or Girl"

"Will It Rain Before Friday?" Label the categories yes or no. Use the graph early in the week. Keep it until Friday and compare the results of the weather and your predictions.

"I'd Rather Eat ..." Use categories such as pizza or hamburger apple or orange, peanut butter sandwich with or without jelly.

"I'm Wearing ..." Use categories such as jeans or other garments: belt or no belt, tennis shoes or other shoes.

Stand-On Graphs There's lots of action with stand-on graphs. Children actually stand or sit on large squares in the categories of their choice. Tape or draw a graph grid on the floor using squares large enough for the children to stand on. Use two or four categories. Make a large name tag for each category and each child. Child can leave his/her name card when he/she leaves graph. This assists in the transition from real to symbolic. Announce a topic for the graph. Have the children sit or stand on the appropriate category. Analyze the graph, perhaps having the children sit as they are counted. Some subjects you might use for stand-on graphs follow.

"My Age" Mark categories as younger than five, or older than five.

"My Skirt or Top" Use plain, stripe, or pattern as categories. Draw an example of each of the markers.

"My Hair Color" Use colors found in the class.

"Length of My Name" Mark the categories as shorter than five letters, five letters, or longer than five letters.

Block Graphs These easily-made graphs are similar to vertical bar graphs. Mark categories on a piece of cardboard or inside file folder. Let each child pile a block to show his choice of categories. Discuss the higher and lower stacks of blocks and the numbers of people they represent. Block graph topics might be:

"Where I Live." Choices could include house, trailer, condo, or apartment.

"My Favorite Pet" Features categories such as dog, cat, horse, fish, and "other."

"I'd Rather Drink ..." Offer milk, hot chocolate, or juice as the choices.

"I Help At Home By ..." Consult the children for some categories.

Fill-in-the-Blank Graph These graphs can be made in a horizontal or vertical bar graph format. Children should have experience with both types. You can prepare a grid, leaving blank spaces for the title and category names. Then cover the graph with clear contact paper. Fill in the blanks with crayon or grease pencil. Have the children mark their choices of categories by coloring in squares or by writing their names in squares. With another type of fill-in-the-blank graph, you can glue little pictures to the squares in the proper categories. Some themes you might use are:

Number of Legs Ask the children to draw pictures of real or fanciful animals with varying numbers of legs. Paste the pictures to categories with 2, 4, 6, 8, or more than 8 legs.

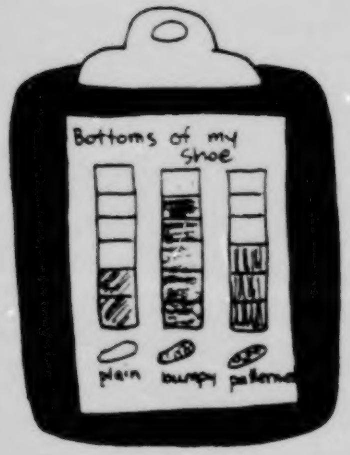
Traffic Work outdoors with a small group. Fill in squares as cars, station wagons, and other vehicles pass by.

Superheroes Ask the children for suggestions of superheroes. Write several on the categories of a graph. Let the children write their names on squares to represent their favorite superheroes.

After School Activities Let the children show what they like to do after school by marking categories such as watching TV, playing outdoors, playing indoors, visiting friends, or shopping.

My Family Have each child draw their family on a small square of paper and glue it to a family graph.

Food Groups Children can glue small pictures of foods to categories such as fruits, meats, milk products, and bread.



Pupil Poll

Pupil Poll Two or three pupils can become pollsters and show their classmates' opinions on a graph. Duplicate some graph grids (A pattern is suggested in the pattern section.). Help a small group of children devise a title and categories for a poll and write them on the grid. It helps children if you color-code the categories and let them mark squares on the grid with the colors. For example in asking about their classmate's favorite fruits, one group of children used red for apples, orange for oranges, yellow for bananas, and brown for "other". During activity time let the children go around, poll each classmate, and mark squares on the graph. At a large group time, have the group of pollsters share their results with the class. Some popular topics for young pollsters are:

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"My Favorite Cookie" You might use choices like chocolate chip oreo, or peanut butter.

"My Favorite Color"

"Weather I like" Offer choices of hot, warm, cool, and cold.

"The Bottoms of My Shoes" Here the pollsters can ask each classmate to show the bottoms of their shoes and decide if they are smooth, bumpy, or patterned.

Bulletin Board Graphs These graphs feature actual sized figures for comparison. Have the children trace some features on paper, cut them out, and attach them to the graph. Or you can cut long strips of paper to represent actual sizes of objects. Adding machine tape works well for this purpose. Some kinds of bulletin board graphs follow.

"Hand or Foot Graph" Have the children trace their hands or feet and attach them in small, medium, and large categories.

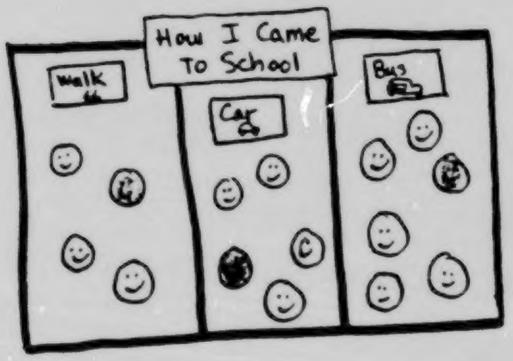
"Broad Jumps" Set up a place to let the children broad jump. As each one jumps, cut a long strip of paper to represent the jump. Let each child write his name on the paper. Arrange the papers in order on a bulletin board.

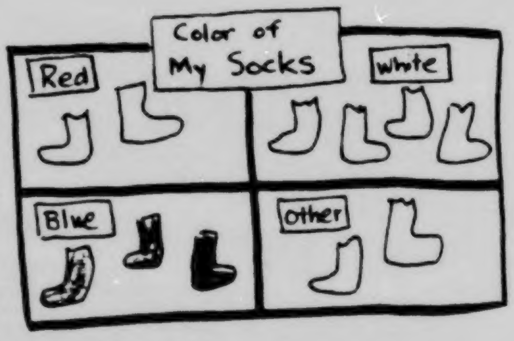
"Our Heights" Cut strips of paper to represent each child's height.

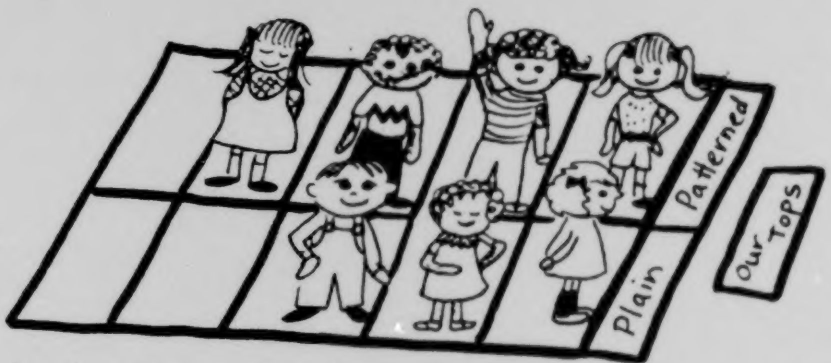
"Around My Head" Let each child put a paper strip around his/her head and cut the strip off to the correct length.

"It's Me!" Help children make life-sized tracings of their whole bodies. Arrange the big figures in categories such as boys and girls or people with one-piece and two-piece outfits, or order the figures by height.

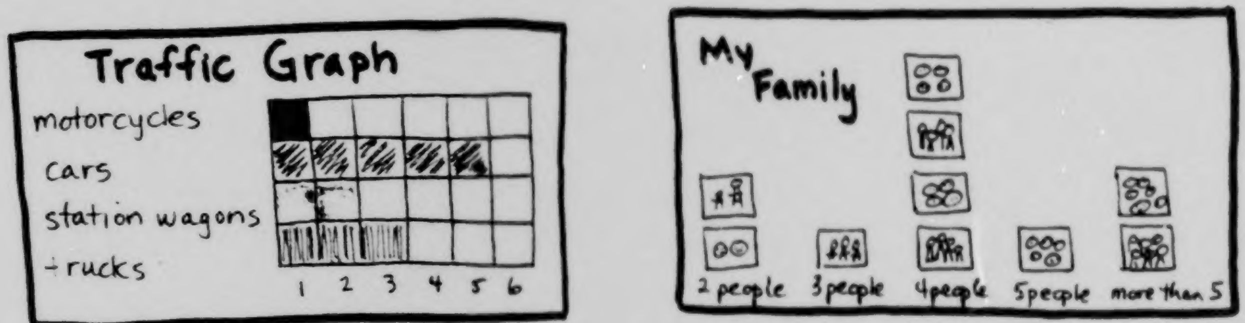
Evaluation: Teacher recorded observation of children's responses--Do they contribute their opinions to the graphs? Do they choose the correct categories? How well do they count and compare categories? Do they suggest topics or categories for graphs?


How I Came To School
Walk
Car
Bus

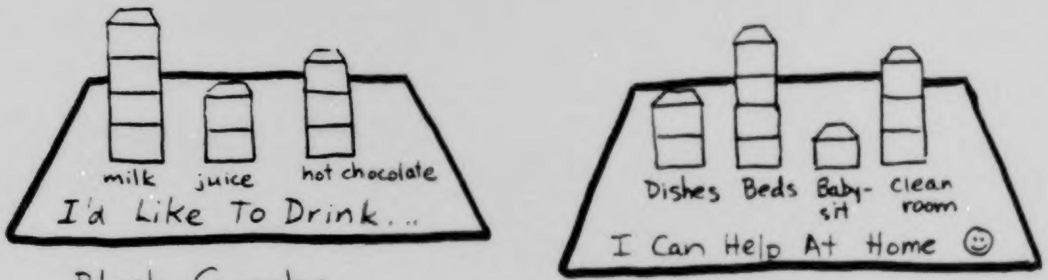



Patterned
Plain
Our Tops

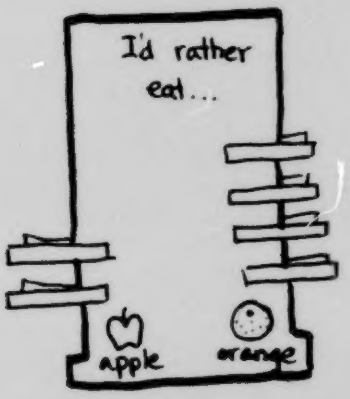
A stand-on graph

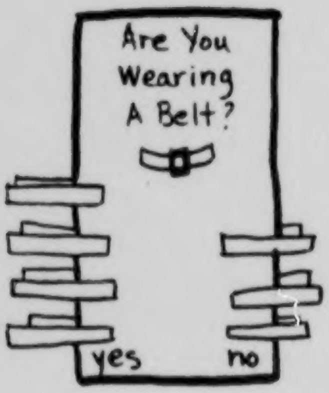

Traffic Graph
motorcycles
cars
station wagons
trucks
1 2 3 4 5 6
My Family
2 people
3 people
4 people
5 people
more than 5

Fill-in-the-Blank Graphs


milk
juice
hot chocolate
I'd Like To Drink...
Dishes
Beds
Baby-sit
clean room
I Can Help At Home ☺

Block Graphs


I'd rather eat...
apple
orange


Are You Wearing A Belt?
yes
no

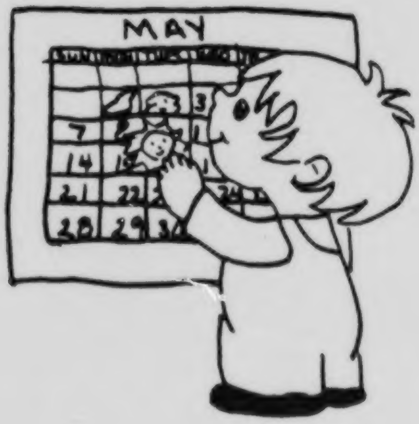
Title: Weather Watch

Objective: The child will be able to categorize.

Materials: 24" x 36" piece of posterboard, ruler, pencil, black marker, thumb tacks, patterns for weather symbol, (given in pattern section), crayons, scissors, envelope

Procedure: Make a blank calendar for the upcoming month on a 24" by 36" piece of posterboard. Measure a rectangle 35" by 20" high. Divide the rectangle into boxes, 5 inches wide and 4 inches high. With a black marker, write the name of the month at the top of the calendar and fill in the day of the week above each column. Then write the appropriate dates in the boxes. Tack the calendar onto the bulletin board or in a space low enough for the children to easily reach. Make several of each weather symbol and place in an envelope next to the calendar. Tell the children they are going to keep track of the month's weather on the calendar and at the end of the month count the number of days sunny, rainy, snowy, or cloudy. Each day, have a calendar helper to describe the day's weather and select the appropriate weather symbol for that day. Attach to calendar using thumb tack. At the end of the month, look at the calendar and count the number of sunny days, rainy days, and so on that were in the month. Make a graph by coloring in the appropriate number of each type weather.

Evaluation: Teacher recorded observation.



Title: Introducing One Half

Objective: The child will demonstrate the conceptualization of simple fractions.

Materials: Playdough, plastic serrated knife, copy of rhyme

Procedure: Make a large triangle from playdough. Say the rhyme below as you cut the playdough into two equal parts.

I have a red triangle.
I cut it right into.
I cannot give you all of it.
But I'll give half to you.
(Give a child half.)
And I give half to you.
(Give another child half.)

Cut out squares, rectangles, and circles of different colors of playdough. Adapt the first line of the rhyme to the space by substituting the name and color of the shape. Continue until all shapes are cut and the halves distributed. Ask the children then to find their patterns and put the halves back together to make whole shapes. Ask the children how many halves it takes to make a whole?

Evaluation: Can the child tell you that it takes two halves to make a whole? Can they demonstrate by cutting an object in half? Record observed responses.

Title: Number Please

Objective: The child will gain practice in number recognition.

Materials: Pattern for telephone. (given in pattern section), crayons, pencils, sturdy posterboard, stapler, shoe box, marker, 3" x 5" unlined index cards.

Procedure: Using sturdy posterboard, make a telephone (pattern in pattern section). Staple the telephone onto one of the narrow sides of the shoe box. Take ten of the index cards and using a marker write a number 0 to 9 on each card. Place the cards facedown in the box. Write each child's telephone number on another telephone number card and give each a pencil or crayon. Choose one child to be the operator. The operator will pick one card at a time from the box and read it out loud. Children with that number on their telephone number cards will cross out that number. Only one number can be crossed out at a time. The operator drops the card back in the box, facedown, picks another card card, and reads the number. The game continues until one child has crossed out all the numbers on his or her telephone number card. The child then stands up and says, "Hello." He then reads his/her telephone number out loud and is the operator for the next game.

Evaluation: Can the child correctly cross out the numbers in his/her own telephone number? Can the child say his/her phone number? Record observed responses.

Title: The Candy Store

Objective: The child will gain practice using coins and recognizing money values.

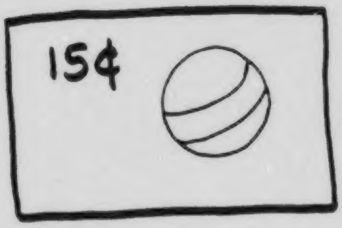
Materials: Posterboard, construction paper (assorted colors). black markers, can of money, (pennies, nickles, dimes, and quarters) box and lables for storage.

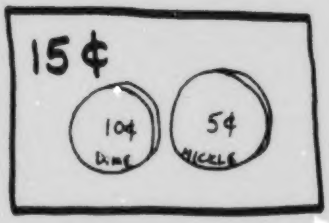
Procedure: From posterboard make several cards approximately six inches by seven inches. Draw a variety of candy shapes on the construction paper. Cut these out and glue to each card using a variety of groupings. Give each card a price value and outline a space where the appropriate coins can be placed. Tell the child he/she is going to the candy store to buy a treat. Look at the price of the candy on the card. Take money from the money can and place in the space designated to "buy" the candy.

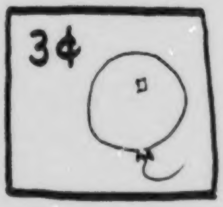
Evaluation: Teacher recorded observation. Can also be a self-checking activity by placing pictures of the correct coins on the back of the candy cards.

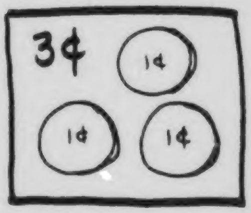
Title: Prices and Coins

Objectives: The child will be able to match pictures of coins and real coins, to work with prices and money, to read and associate their meaning with prices









Materials: Cards with pictures of low-priced items, their prices and pictures of coins to equal each price; real coins.

Procedure: This activity lets children practice the important skills of reading numerals, handling coins, and matching coins. Prepare the picture cards. Work with a small group of children. Have the children name the items "for sale," read the prices, and lay real coins over each coin picture. Name the coins that are used. Discuss the pictures and see what things the children would really like to buy. Compare the prices. Have the children try to tell which prices are more and less than other prices.

Evaluation: Teacher recorded observation of children's work--Can children name the objects and coins? Can they read the prices? Do children match the coins and pictures successfully?

Title: Playing Store

Objectives: The child will be able to practice counting, work with prices and money, develop communication skills, and participate in role-playing.

Materials: Tables or cabinets; materials to simulate a grocery store, beauty shop, drug store, or other "business," papers and pencils; toy cash register; play or real money; props for clerks and service people

Procedure: Help the children to set up a classroom store. Invite the children to bring props to add to the store. Let groups of children play in the store, encouraging them to count and pay for goods and services. They may want to make lists of items to purchase or write "bills" or "receipts." Keep the store going for several days to let all the children have a turn.

Evaluation: Teacher observation of children's responses--Do children participate? Do they seem motivated to use money in "paying for" goods and services? Are children cooperative in the roles they play?

Title: Tick and Tock

Objective: The child will be able to differentiate between the minute and hour hand on the clock.

Materials: Clock with movable hands, copy of story

Procedure: Tell this story as you show the action of the hour and the minute hand on a large cardboard clock with movable hands. Then encourage the children to dramatize the story.

Tick and Tock live in a clock. Tick is short. (Point to the small hand.) It goes around the clock very slowly. As it does so, you can hear it say "Tick, tick, tick, tick."

Tock is loud and thin. (Point to the long hand.) Tock pushes itself around the clock very quickly and you can hear it say, "Tock, tock, tock." Together Tick and Tock say "Tick-tock, tick-tock, tick-tock."

Sometimes Tock, who is long and thin, pushes so fast that it jumps right over little Tick. (Demonstrate.) Tock passes little Tick every hour--once every sixty minutes: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60--just like that. (Move the minute hand as you count the minutes.)

One day, little Tick said, I am tired of letting you jump over me. You pass me too often. I am going to jump over YOU."

"Very well, then," said Tock, "I'll go a bit slower and then you can jump over me."

So what do you think happened? Everyone was all mixed up.

Mother said, "What in the world has happened to this clock? The little hand is going fast and the long hand is going slow. This will never do. I will not know when to start cooking dinner. I may be late for an appointment.

Daddy said, "Mercy me! If that clock doesn't behave itself, I won't know when to go to work. I'll lose my job."

Aunt Susie said, "I will either be too late or too early for school. I am a teacher and must be on time. Whatever got into that clock anyway?"

The children said, "We won't know when to catch the school bus or play outside or go to bed. That clock's hands aren't working right."

Long, thin Tock and little Tick heard all of this and were sorry they had upset the family. So they decided to go back to the way they were, and from then on they behaved the way a clock's hands should.

Evaluation: Child will be able to move the minute hand and the hour hand at teacher's request. Teacher records observations made.

Title: Five Minutes

Objectives: The child will demonstrate a realization of time (five minutes).

Materials: Clock, timer, directions for children

Procedure: Tell the children that you are going to see what they can do in 5 minutes. (Show 5 minutes on the clock). Give some suggestions but also let the children make suggestions. Tell them you are going to set a timer and when you say "Go", they are to start their task. Set timer. Tell children to begin. Some tasks could include: draw a picture; walk around the building; or find two things that are rough in texture. At the end of 5 minutes signal stop. Be sure to encourage the child to note the time on the clock when you say "Go" and when time is up. Invite volunteers to tell what they did in 5 minutes. Ask them if five minutes seemed long or short and encourage them to give reasons why.

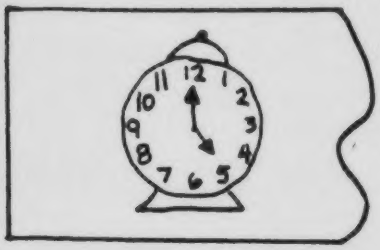
Evaluation: Children's responses to activity in five minutes.

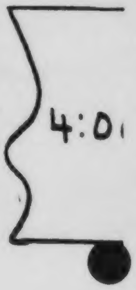
Title: Time Puzzles: On the Hour

Objective: The child will gain practice in time telling.

Materials: 3" x 5" index cards, markers, scissors, contact paper

Procedure: On the left-hand side of each card draw the face of a clock with the time showing "on the hour". On the right-hand side of each card, write the numerical time corresponding to the clock face. Cover the card with clear contact paper. Then, cut the card into two pieces to create a jigsaw puzzle. Make as many card puzzles as you wish. Instruct children to find a large surface, such as a table or the floor and spread the puzzle parts. The children will then match the ends of the cards so that the face of the clock and the written time are the same.





Evaluation: Can the children correctly match the clocks and the correct corresponding time? Record children's responses as made.

Title: Bertha Bird

Objective: The child will gain practice in correctly identifying time on the hour.

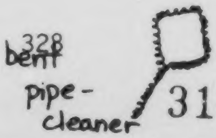
Materials: Posterboard, colored paper, scissors, markers, clear contact paper, pattern given in pattern section.

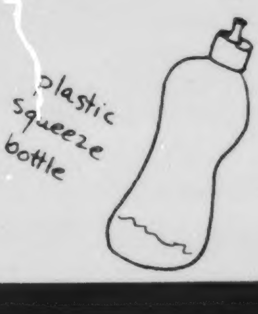
Procedure: Using pattern given, make several birds and add features. Label each clock on the bird's stomach with a different time. (Make each time show the o'clock hour for beginners). Write the matching time on each worm. Put the correct answer on the back of each bird so that the students can check their work. Instruct the students to look at the clock on each bird and find the worm that has the same time on it.

Evaluation: Can the child correctly match the time on the clock and the time on the bird? Record responses observed.

Bubble wands

Title: Soap Bubbles

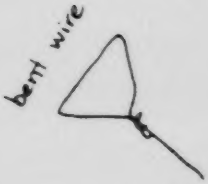




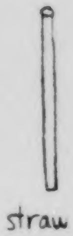
Objectives: The child will be able to practice counting and measuring, to work with geometric shapes, to enjoy a relaxing and beautiful activity.

Materials: Liquid detergent, water (in a bucket or gallon jug), glycerin, medicine dropper, medium bowls, small scoop, small cup, bubble wands made from junk materials, bubble recipe (in the pattern section)

Procedure: Children can make their own bowls of bubble solution or share them with friends. Unique bubble wands make this activity especially interesting. It's most appealing on a warm day. Let each child prepare their own bubble solution following the recipe shown in the pattern section. Use bubble wands in some of the shapes shown below. Discuss the shapes of the wands and of the bubbles ("balls" or spheres) as the children work with them.

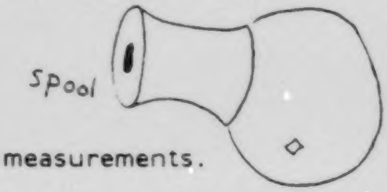


Evaluation: Teacher recorded observation of children's responses--Can they make the bubble recipe independently following instructions and counting? Can they name some of the geometric shapes? Do they seem to enjoy the activity?



Title: Peanut Butter Balls

Objective: The child will gain practice in using metric measurements.



Materials: Recipe written large enough for child to easily see, metric measuring equipment, mixing bowl, eggs, vanilla, salt, crunchy peanut butter, powdered milk, powdered sugar

Procedure: Using the recipe below follow the directions and make.

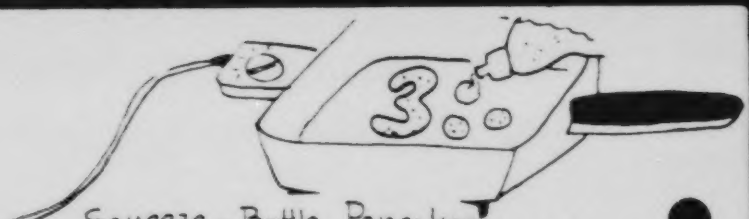
Ingredients:
2 egg yolks
5 ml vanilla (1 teaspoon)
1 ml salt (¼ teaspoon)
250 ml crunchy peanut butter (1 cup)
125 ml powdered milk (½ cup)
250 ml powdered sugar (1 cup)

How to Make: Mix the egg yolk, vanilla and salt together in a bowl. Beat well. Add the peanut butter, sugar, and milk. Mix thoroughly. Knead the mixture with your fingers until it is firm. Shape the balls about one inch in diameter and roll in powdered sugar.

Makes about 16 peanut butter balls

Evaluation: Can the child correctly identify and measure the ingredients? Record responses.

Other recipes may be found in the Cooking Section of this resource book.



Squeeze - Bottle Pancakes

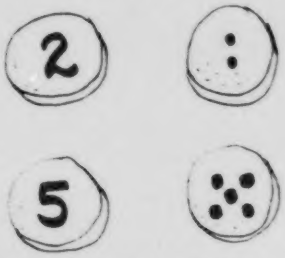
Title: Numeral Pancakes

Objectives: The child will be able to count and measure while preparing pancakes, to discuss safety with electrical appliances, to make pancakes in various shapes.

Materials: Ingredients for pancakes or pancake mix, electric skillet, cooking oil, recipe chart (A tabletop recipe is in the pattern section.), paper pancakes, cinnamon sugar, plates.

Procedure: Pancakes make a different and nourishing snack. They're fun and easy to make in various shapes when poured through a squeeze bottle. Thoroughly wash a squeeze bottle from detergent or shampoo. Enlarge the hole in the top by heating a large nail or kitchen skewer on a stove burner. Then insert the skewer through the plastic lid. Make the pancake recipe with the children. Pass out numbered paper pancakes to each child in a small group. Let each add the ingredient that their paper indicates. Pour the batter into the squeeze bottle. Discuss safety in using the electric skillet with the children. Help the children take turns using the bottle to form pancakes in the shapes of numerals. Make tiny round pancakes to go with each numeral. If you form a three, for example, make three small round pancakes to go beside the numeral. Eat the pancakes plain or with cinnamon sugar.

Number- Numeral



Pancake Matchup

Evaluation: Teacher recorded observation of the children's responses--Do they follow the recipe, taking turns and measuring and counting the ingredients? Do they follow safety procedures when making the pancakes? Do they associate numerals and numbers of small pancakes?

Extension: Another day, make geometric shape or letter pancakes. Make pancake puzzles for number-numeral matching and let the children work with them. Make felt "pancakes" for the flannel board and tell a story or make some oral problems to go with them. Discuss other foods that can be cooked in an electric skillet.

Title: Play Dough

Objectives: The child will be able to practice counting and measuring, to make a recipe following a sequence, to discuss hot and cold, to make playdough to use in other activities.

Materials: Flour, salt, source of hot water, alum, cooking oil, airtight container, recipe cards, chart for "hot and cold" discussion, measuring cups and spoons, stirring spoon and bowl.

Procedure: Making a recipe lets children use their math skills of counting, measuring, and sequencing as well as the social skills of taking turns and working together to make something. Work with a small group of children to make the recipe for playdough found in the pattern section. Give each child a card for a recipe ingredient and let each add the ingredient. Talk about the colors, textures, and amounts of each ingredient. Help the children to use the measuring equipment. After the playdough is made, set it aside to cool. Collect and shuffle the recipe cards. Discuss the sequence in which the recipe was made. Help the children arrange the recipe cards in order. Fill in the "hot and cold" chart, having the children list lots of things that are hot and cold.

Evaluation: Teacher recorded observation of children's responses--Do they use measuring equipment skillfully? Do they follow the recipe? Can they sequence the recipe? Do they participate in the discussion of hot and cold?

Extension: Make geometric shapes of playdough. Use the playdough to make playdough numerals. Add food color or knead textured ingredients (oatmeal, sand, cornmeal) into the playdough.

Title: Fruit Salute

Objectives: The child will be able to measure and weigh fruits, to order fruits by sizes, to classify fruits, to talk about geometric shapes found in fruits, to practice counting, to make a graph, to prepare a nutritious snack.

Materials: Scales, tape measure, fruits brought by children, graph grid, crayons, knives, plates for fruit salad, bowl.

Procedure: Ask each child to bring a piece of fruit. Arrange the fruits on the rug or table. Let the childen suggest ways to group and sort them. Discuss the shapes, sizes, colors, and textures of the fruit. Arrange some of the fruits in order from smallest to largest. Fill in the graph grid with the names of the fruits and let each child fill in a square for the fruit he/she brought.

Now work with the fruits in a small group activity. Help children use a scale to weigh the fruits. Record their weights on a chart and read over some of the data from the chart. If you find that an orange weighs about 200 grams (7 ounces), pass it around the group and say, "This weighs about 200 grams; feel it." Choose another lighter fruit to hold, then weigh. Help the children use a tape measure and measure and record some of the lengths and circumferences of the fruits.

Finally, help a group to wash and cut up some of the fruits for fruit salad. As you cut up the fruit, let the children cut some into halves, then fourths. Discuss the functions, then let the children cut the fruit into smaller pieces. You will probably want to save some for the next day or make juice or applesauce from some of the fruits. Serve the salad and discuss how everyone's contributions helped to make a delicious snack for the class.

Evaluation: Teacher recorded observation of children's responses--Can children classify the fruits? Did they suggest categories for sorting? How well did children describe the colors, shapes, sizes, and textures of the fruits? Could children help in measuring and weighing the fruits and recording the data? Were children skillful in washing and cutting up fruit?

Title: Sharing Soup

Objectives: The child will be able to describe and classify vegetables, to measure and weigh vegetables, to practice counting, to make and interpret a graph to prepare a nutritious snack.

Materials: Vegetables brought by the children, scales, tape measures, graph grid, crayons, knives, crock pot, bowls and spoons, bowl

Procedure: Follow the instructions for "Fruit Salute." Make a vegetable soup by chopping and cooking the vegetables in broth or water. As you prepare the vegetables, let the children taste bits of them raw.

Extensions: Do some vegetable printing by dipping cut vegetables into paint and printing onto paper. Talk about the nutritional values of vegetables. Ask some vege-riddles such as these?

What's brown and has eyes and grows under the ground? (potatoes)

This grows in a pod. Usually many grow inside one pod. What is it? (peas)

It's a red vegetable. (beet, radish, or tomato)

It can make you cry with its strong smell. (onion)

It's fat and red. Catsup is made from it. (tomato)

You can pop it or eat it from the cob. (corn)

Grow a potato or onion in water. Support the vegetable with toothpicks. Leave it for several days. You'll see roots first, then leaves. Make a picture record of the way the potato grows.

Evaluation: Teacher recorded observation of children's responses--Can they describe and classify the vegetables? Can they describe the numbers, colors, textures, and shapes of the vegetables? Can the children help to measure and weigh the vegetables? Were the children skillful at helping to prepare the stew? Were they receptive to eating it.

Title: Popcorn

Objectives: The child will be able to follow a sequence of steps to make a recipe, to measure and compare, to divide popcorn, to compare popped and unpopped corn, to provide a nourishing snack.

Materials: Popcorn, oil, measuring cups, large bowls, paper, glue, rulers, recipe chart, popcorn popper

Procedure: Few snack food are more appealing and inexpensive than popcorn! You can use popcorn not only as a snack but as a learning material in this activity. Let a small group prepare popcorn according to the recipe chart in the pattern section. Let the children watch the second hand on a clock and see how long it takes the popcorn to begin popping and to finish popping. Measure the volume of popped corn and compare it to the volume of unpopped corn. Probably the corn's volume will expand 10 to 20 times during popping.

Save 500-750 ml (2-3 cups) popcorn for a measuring activity. Have the group divide the popped corn among the class. Perhaps they could place 125 ml (½ cup) popcorn on a napkin for each child, then see if there is any left over. They can distribute the left overs as evenly as possible. The children might line up 10 kernels of popped corn and see if the line is longer or shorter than their napkin or count the kernels of corn that they eat.

After the children have eaten their snack, give each child a piece of paper, some glue, 10 kernels of unpopped corn, and 10 kernels of popped corn. Let them glue the corn in place and compare the length of each row. Help them measure the length of each row.

Evaluation: Teacher recorded observation of children's responses--Do they help with measuring and cooking? Can they help with dividing the popcorn? Can children make comparisons between the popped and unpopped corn?
Extension: Shake some popped corn with a small amount of tempera paint in a closed jar. Use the colored popcorn for an art activity (not for eating). Help the children string popcorn on thread for a Christmas tree decoration or for winter-time food for the birds. Plant unpopped corn in dirt. Keep it well watered. Observe and measure the little popcorn plants as they grow.

Title: Machines Help People

Objective: The child will be able to demonstrate the idea that machines help people with mathematics.

Materials: Catalog and newspaper pictures of people and calculators, computers, and other machines that help people with mathematics, paper, glue.

Procedure: Help the children find appropriate pictures of machines and people using them. Talk about some of the ways people use calculators and computers to work with numbers. Have the children glue pictures to paper to make individual or group collages of helpful machines.

Evaluation: Teacher recorded observation of children's responses--Do they select and discuss appropriate pictures? Do they add to the collage?

Title: Sharing Computer Toys

Objectives: The child will build communication skills, and demonstrate an awareness of computers in our lives.

Materials: Toys brought by the children

Procedure: This activity works well after Christmas or other holiday time when children may be eager to share new toys. You may want to set up a schedule for sharing of toys to distribute the numbers throughout the week. Think about ways to assure the children that toys they bring will be handled carefully and returned safely to the owners.

Let the children take turns showing their computer toys, telling how they think they work, and showing what they do. Have children tell how they must take care of their toys to prevent breakage or wearing down of batteries. Talk to the children about the wide variety of computerized toys and other household appliances and tools that may be computerized.

Evaluation: Teacher observation of children's responses--How well do they "show and tell" about their toys? Are the children responsibile about handling their own toys and those of others?

Title: A Classroom Guest

Objectives: The child will learn from a guest sharing knowledge of computers or calculators, practice communications skills, to increase awareness of the uses of computers and calculators.

Materials: A guest who can bring a calculator or computer to show the children.

Procedure: Your classroom guest may be a fourth grader, a high school student, a parent, or a hobbyist. Invite someone to show the children some things that can be done with a computer or calculator. Encourage the guest to plan just a short presentation and if possible, to let the children take turns working with the guest's computer or calculator. Be sure to have the children help you write a thank you note to the guest after the session. You might want to plan several guests scheduled throughout the year.

Evaluation: Teacher observation of the children's responses--Do the children listen to and watch the guest? Do they ask questions or make appropriate comments? Do the children seem interested in the guest and the computer or calculator?

Title: Programming a Picture

Objectives: The child will experience using a computer, typing, and following a sequence of steps.

Materials: Task cards, computer

Procedure: One of the easiest ways to "draw" a picture on a computer is to program a series of steps that direct the computer to print x's and o's in different positions on its screen. Make some task cards such as those shown in the pattern section. Have a small group of children carefully type in the statements below, check their work, then run the program to see a picture.

This program will print a happy face:

```
10   REM  PRINT SPACE, 9 X'S
20   PRINT " XXXXXXXXX"
30   REM  PRINT SPACE, X, 7 SPACES,
     X
40   PRINT " X       X"
50   REM  PRINT SPACE, X, SPACE, 0,
     3 SPACES, 0, SPACE, X
60   PRINT  " X 0   0 X"
70   REM  PRINT SPACE, X, 3 SPACES,
     X, 3 SPACES, X
80   PRINT " X   X   X"
90   REM  PRINT SPACE, X, SPACE, X, 3
     SPACES, X, SPACE, X
100  PRINT  " X X   X X"
102  REM  PRINT SPACE, X, SPACE, 5
     X'S, SPACE, X
105  PRINT " X XXXXX X"
110  REM  PRINT X, 7 SPACES, X
120  PRINT "X       X"
130  REM  PRINT SPACE, 9 X'S
140  PRINT " XXXXXXXXX
150  END
```

```
XXXXXXXXX
X       X
X 0   0 X
X   X   X
X X   X X
X XXXXX X
X       X
XXXXXXXXX
```

This program will print a heart and a message:

```
10   TEXT : HOME
20   PRINT "  XXX XXX "
30   PRINT " X   X   X"
40   PRINT " X       X"
50   PRINT "  X     X "
60   PRINT "   X   X  "
70   PRINT "    X X    "
80   PRINT "     X        "
90   PRINT "
```

```
100  PRINT
110  " WE MADE A HEART"
120  REM  INSERT NAMES IN NEXT LINE
130  PRINT " BY
140  END
```

```
 XXX XXX
X   X   X
X       X
 X     X
  X   X
   X X
    X

WE MADE A HEART
```

The program will print a pine tree:

```
10   TEXT : HOME
20   PRINT     "     X     "
30   PRINT     "    XXX    "
40   PRINT     "   XXXXX   "
50   PRINT     "  XXXXXXX  "
60   PRINT     "     X     "
```

Make some other pictures on graph paper. Cut the x's, o's and spaces, and make your own task cards to create a picture on the screen. Discuss with the children the idea that people must tell computers what to do. People instruct computers by using a series of steps called a program.

Evaluation: Teacher observation of the children's responses--Are they willing to try to type on the computer? Are they careful as they type characters and spaces? Do the children seem to see a cause and effect relationship between the steps they type in and the picture on the computer screen?

Title: A Name Game

Objective: The child will respond to questions displayed by a microcomputer, type on the computer, use a simple program to print out names.

Materials: A microcomputer

Procedure: Type the computer program found on the next page into a microcomputer. Type RUN and press the return (or enter) key to make the program work. Help the children read the instructions and type in their responses. They need only type in their names and a number. You may wish to vary the program to make it "fancier." Perhaps a junior high or high school student or parent can help you.

Evaluation: Teacher recorded observation of children's responses.

```
10   TEXT : HOME
20   PRINT "TYPE IN YOUR NAME ."
30   PRINT "WHEN IT IS CORRECT,"
40   PRINT "PRESS THE RETURN KEY."
50   PRINT
60   INPUT NA$
70   PRINT : PRINT : PRINT "THANK YOU, ";NA$;" ."
80   PRINT : PRINT : PRINT "I'LL PRINT YOUR NAME ON THE SCREEN."
90   PRINT : PRINT "HOW MANY TIMES DO YOU WANT TO SEE IT ?"
```

```
100  PRINT "I CAN PRINT IT 1 TO 10 TIMES."
110  PRINT : PRINT : PRINT "CHOOSE A NUMBER 1 TO 10."
120  PRINT "TYPE IN THE NUMBER AND PRESS RETURN."
130  PRINT : INPUT N
135  TEXT : HOME
140  IF N   10 THEN  PRINT "I CAN ONLY PRINT 1 TO 10 TIMES":
     PRINT : PRINT "CHOOSE A NUMBER 1 TO 10.": INPUT N
150  FOR K = 1 TO N
160  PRINT NA$: PRINT
165  FOR T = 1 TO 500: NEXT T
170  NEXT K
180  PRINT : PRINT
190  PRINT "THANK YOU, ";NA$
200  PRINT "I HOPE YOU ENJOYED SEEING YOUR NAME."
210  FOR T = 1 TO 2000: NEXT T
215  PRINT : PRINT
220  PRINT "TO START THIS PROGRAM AGAIN,"
230  PRINT "TYPE RUN AND PRESS THE RETURN KEY."
```

Title:	Using Computer Programs
Objectives:	The child will demonstrate an awareness of computers and how to use them, to reinforce specific skills (dependent on the content of each program).
Materials:	Microcomputer and software
Procedure:	You may have access to a microcomputer at your school or parents may be able to bring one for the children to use. Small groups of children can work at the computer; they can take turns sitting at the keyboard and watching. Usually much interaction occurs near the computer. You might want to establish the rule that only the child at the keyboard can type in responses, though others may give advice. Teach the children to handle the computer with care and respect, to touch the keys gently, and to use clean hands at the computer. Load a program. If it includes reading materials, help the children to read it; they will soon be able to work independently. Let the children take turns working the program. Teachers will need training for running the microcomputer, selecting software, and designing their own programs. Children love to use computers and learn quickly to operate them. Teachers can reinforce the children's learning by asking the children pertinent questions, or asking the children to tell what the program has taught them.
Evaluation:	Teacher observation of the children's work.

The State Department of Education has available several computer software programs for kindergarten age children. Should you wish more information contact Mrs. Dollie Mosley at the State Department of Education.

A SPECIAL UNIT: MATH AT HALLOWEEN

The seven areas of mathematics in this curriculum guide can easily be covered when a unit or special theme is used in the Kindergarten classroom. An example follows:

Area Covered: Thinking Skills and Vocabulary

Title: A Haunting We Will Go

Objective: The child will be able to demonstrate conceptual understanding of positional words.

Materials: Posterboard, markers, black and yellow paper, clear contact paper, pattern for haunted houses and ghost

Procedure: Cut out several haunted houses from black paper, add yellow windows and doors to look like lights. Cover with clear contact paper for protection. Cut out ghost shapes from white posterboard using patterns given. Add eyes. Cover with clear contact. Tell the children that the ghosts are having trouble deciding which house to haunt at Halloween. They have asked you children to be their little helpers and find out the best ways to haunt the houses. As the teacher reads the directions, take the ghosts and place them exactly where she tells you to.

Examples are:
Place a ghost on a haunted house
Place a ghost over a haunted house
Place two ghosts at the bottom of a haunted house.
Place a ghost above a haunted house.
Place two ghosts beside a haunted house
Place three ghosts around a haunted house.
Place a ghost under a haunted house.
Place a ghost near a haunted house.

Evaluation: Teacher observation as the child follows directions and places the ghost in the positions asked.

Area Covered: One-to-One Correspondence

Title: Witches Hats

Objective: To develop the concept of one-to-one correspondence.

Materials: Felt cutout of witches and witches hats

Procedure: Instruct the children to count the witch cutouts on the flannel board. Ask them how many hats it would take for each witch to have one. Then let the children place one hat on each witch. Ask, "Are there enough hats for each witch?" "How do you know?" Children answer there are six witches and six hats. etc.

Title: Trick or Treat Bags and Children

Objective: To develop the concept of one-to-one correspondence.

Materials: Enough trick or treat bags for each child to have one

Procedure: Say to the children, "Let's count all the boys and girls to see how many children are here." When finished counting say, "We have 18 children here today, how many trick or treat bags will we need if we give one bag to each child?" Ask one child to distribute the bags as you and the other children count out loud. When the bags have been distributed, reinforce the one-to-one concept. Emphasize that 18 children need 18 trick or treat bags.

Title: Ghost and Haunted Houses

Materials: Ghosts and haunted house cutouts (Use ones in activity: "A Haunting We Will Go")

Objective: To develop the concept of one-to-one correspondence.

Procedure: Place the haunted houses in a row on the floor or table. Place the ghosts in a row below the houses. Ask, "Are there enough ghosts to haunt all the houses?" Instruct the children to count out loud the houses and then the ghosts. Reinforce the fact that five ghosts will haunt five houses. Ask them what would happen if one ghost flew away, would there still be enough ghosts for each ghost to have a house to haunt?

Evaluation: Teacher observation; use of teacher checklist

Title: Jack-o-Lanterns and Fenceposts

Objective: To develop the concept of one-to-one correspondence.

Materials: Cutout of a fence with five fence posts and five jack-o-lanterns

Procedure: Place the fence on a table or on the floor, ask the children to count the fenceposts on the fence. Ask, "How many jack-o-lanterns could roll up against the fencepost so that one jack-o-lantern was by each post?" Let the chidlren place one jack-o-lantern by each post. Reinforce the fact that it takes five jack-o-lanterns to be by five fenceposts.

Evaluation: Teacher observation -- can the children match the objects one-to-one?

Area Covered: Counting, comparing, and ordering

Title: Where the Monster Has Been

Objective: To provide practice in counting in order or sequence

Materials: White or colored paper, black markers, stick on numbers, clear contact paper

Procedure: Cut out ten monster footprints. (Make five for the children who are beginning to count.) On each footprint place a numeral one through ten. Outline the footprints with a black marker. Cover with clear contact paper. Ask the children to arrange the footprints in the correct sequence one through ten.

Evaluation: Teacher observation to determine if the children correctly place the numbers on the footprints in sequence.

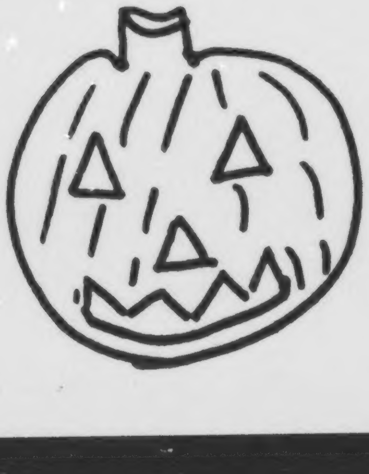
Title: Pumpkin Plates

Objective: To provide practice in counting, comparing and ordering numbers.

Materials: Paper plates, orange construction paper, glue sticks, clear contact paper

Procedure: Place pumpkins on the paper plates in numerical order one through ten. Cover with clear contact paper. Cut out 55 more pumpkins and cover with clear contact. Ask the children to arrange the pumpkin plates in the correct order one through ten. Next place the empty plates in a row below the pumpkin plates. Place the additional pumpkins in a stack close to the row of empty plates. Ask the children to make the row of empty plates look exactly like the pumpkin plates by counting the pumpkins in each plate and putting the same number of pumpkins in the empty plates.
Example: In the plate beneath the number one pumpkin plate, place one pumpkin, etc. Continue until all empty plates match the pumpkin plates above it.

Evaluation: Teacher observation to determine if the children place the plates in order one through ten and if they can count the same number of pumpkins and place in the empty plates to make a matched set of plates.



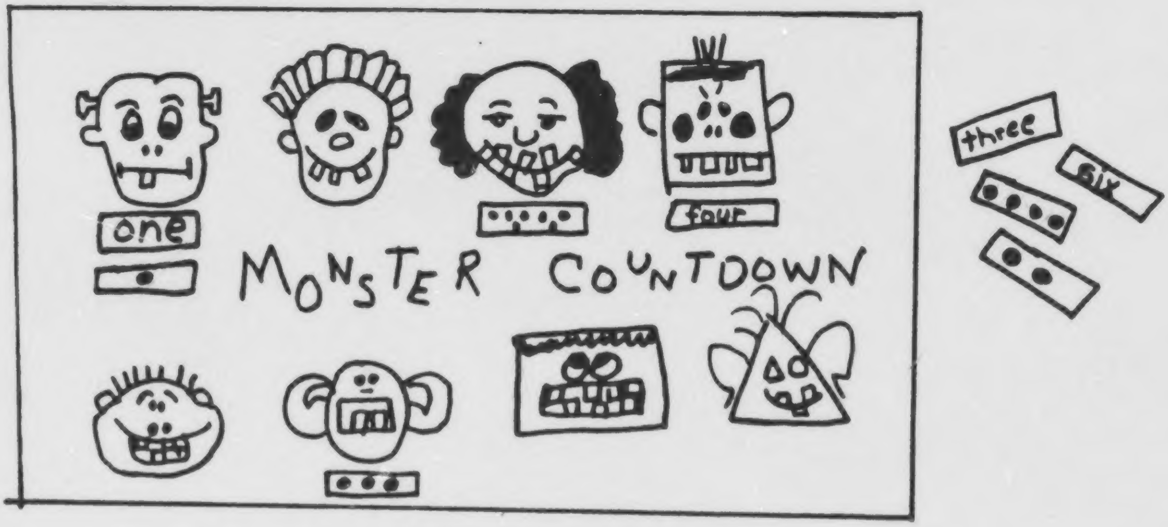
Area Covered: Numbers and Numerals

Title: Monster Countdown Folder Game

Objective: Experience with numbers and numerals

Materials: File folder, art paper, glue, clear contact paper, markers, 3 x 5 note cards, small envelope, stick on letters and numerals, scissors

Procedure: On the inside of a folder, make ten monsters and on each monster have a different number of teeth. Prepare cards showing numbers, number words and number dots for numbers one through ten. Cover the inside of the folder with clear contact paper. Decorate front of folder and place pocket on back to store game cards in. To play the game look at each monster and count his teeth. Find the card with the correct number on it and place under the monster. Find the number word and the number dots also.



Area Covered: Beginning Operations

Title: Halloween Addition and Subtraction Stories

Objective: To demonstrate knowledge of the beginning addition and subtraction facts.

Materials: Stories written on cards for the teacher to read to the children, cutouts of the objects mentioned in the stories for the children to count and manila envelopes for storage

Procedure: Print each story below on a card. Cut out shapes of objects mentioned in the stories. Place each story and the objects to count in a manila envelope for storage. Children will use the shapes as needed to help them solve the addition and subtraction problems in the stories. Make up stories of your own. Examples of stories follow:

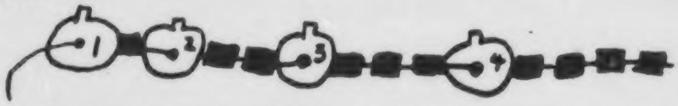
Mary carved two pumpkins at Halloween to make jack-o-lanterns. Bob carved two more pumpkins in Halloween jack-o-lanterns. How many jack-o-lanterns did Mary and Bob have altogether for Halloween?

Tommy put 2 pieces of Halloween candy in his trick or treat bag. His mother wanted to surprise him, so she put three more pieces of Halloween candy into Tommy's trick or treat bag. How many pieces of candy are in Tommy's trick or treat bag now?

Three bats were flying through the dark night on Halloween. One bat decided he was tired and went away. How many bats were left on Halloween night?

One black cat was howling under the full moon on Halloween night when he was joined by four more cats. How many black cats were there all together?

Title: Five Little Pumpkins



Objective: To demonstrate knowledge of the beginning addition and subtraction facts.

Materials: Orange construction paper, markers, scissors

Procedure: Children supply answers as the teacher reads this Halloween rhyme. Begin by placing five pumpkins in a row, take one away (beginning subtraction) as the teacher reads the rhyme.

> Five little pumpkins, looking out the door.
> Look, there goes one, now there are four.
> Four little pumpkins, as you can see
> But one disappears, so now there are three.
> Three little pumpkins, feeling somewhat blue

See, there goes another one, leaving only two.
Two little pumpkins alone in the sun.
Another says, "Goodbye, friend," and that leaves one.

Evaluation: Teacher observation of children's work as recorded on a check-list.

Area Covered: Integrated Activities

Title: Pumpkins On A Vine

Objective: To gain practice working with numbers and numerals, counting; practice with ordinal numbers

Materials: Cardboard pumpkins numbered one through ten each with a hole punched in the center, string and beads on large elbow macaroni colored green to represent the vine.

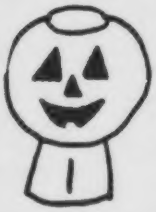
Procedure: The child will begin string with pumpkin number one adding one bead. Proceed with number two pumpkin followed by two beads. Continue stringing pumpkins and beads in this manner until all the pumpkins are placed on the vine.

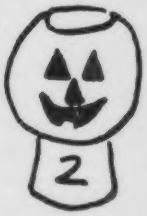
Evaluation: Teacher observation of children's work as recorded on a check list.

Title: Jack-O'-Lantern Math

Objective: To gain practice working with numbers and numerals, counting; practice with ordinal numbers.

Materials: Four upside down paper cups with Jack-O'-Lantern faces stapled to them and a numeral from one through five plainly marked on each of them. One counting disk or small object.





Arrange cups in numerical order. While children close their eyes hide an object under one of the cups. Have the children open their eyes then take turns guessing where the object is by designating the cup by its ordinal number: 1st, 2nd, 3rd, 4th, 5th. Add more Jack-O'-Lantern cups as the children progress.

Evaluation: Teacher observation of children's work as recorded on a check-list.

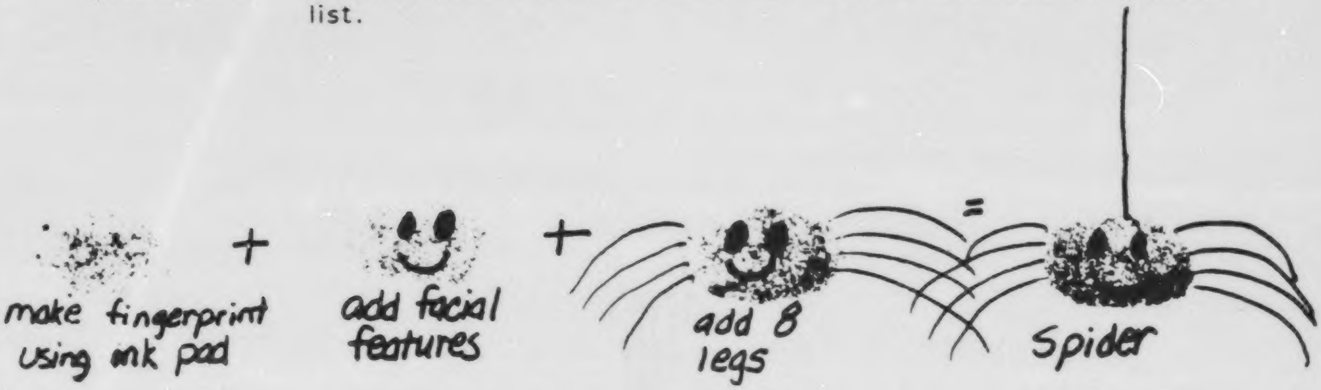
Title: Spider Math Book

Objective: To gain practice working with numbers and numerals, counting; practice with ordinal numbers.

Materials: Drawing paper, ink pad, construction paper, markers

Procedure: Construct a book for each child with five or ten pages of paper for each book. Place a number on each page of the book and make the cover for the book placing the child's name on the cover (ex. Jill's Spider Math Book). Instruct the child to place the appropriate number of fingerprints on each page using an ink pad and then show them how to make Halloween spiders out of their fingerprints as follows:

Evaluation: Teacher observation of children's work as recorded on a check-list.



Title: Self-checking Ghosts

Objective: Practice with number-numeral recognition

Materials: White poster board, stick on numerals and letters, hole punch, contact paper, markers, pencils

Procedure: Cut out ghost shapes for this activity from white poster board. On each ghost place number dots one through ten. At the bottom of the ghost punch three hole and above the holes write three possible answers. Circle the correct number hole on the back of the ghost. Cover with clear contact paper. Children insert a pencil into the hole they think is the corresponding number, then turn over to check. May use numbers and number words to make a little more advanced.

Evaluation: Teacher observation of children's work as recorded on a check-list.

Area Covered: Geometry and Measurement

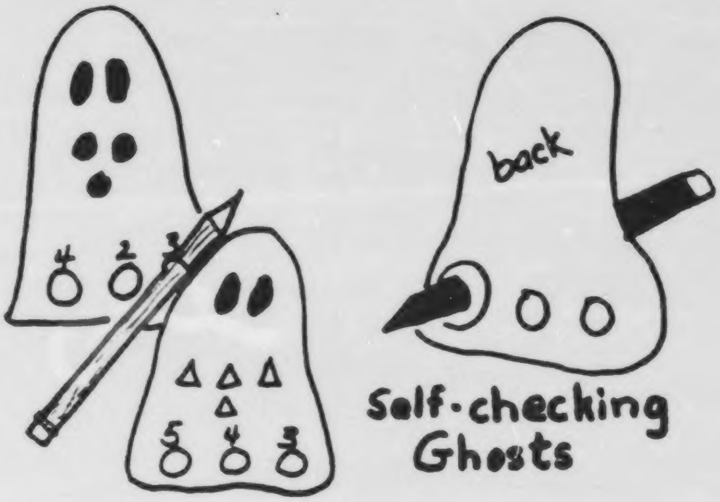
Title: Lost Ghost

Objective: To practice shape recognition

Materials: White poster board, orange and black construction paper, orange and white felt, rubber cement

Procedure: Cut out eight haunted houses from black construction paper. Glue the houses to a piece of white poster board. On each house place different shaped windows, one with circles, one with squares, one with triangles, one with rectangles, (shapes such as a circle and a square window. Make the door to each.) the other four mix the two house from orange felt, secure with rubber cement. Cut out eight ghost shapes and on each ghost place a shape or a shape combination to match the windows on the houses. Make up your own story about the ghost getting lost. Children are to help the lost ghost find their house by matching the shapes of the windows to the shapes on the ghost. The felt ghost will stick to the felt doors on the houses.

Evaluation: Teacher observation to determine if the children correctly match the shapes.



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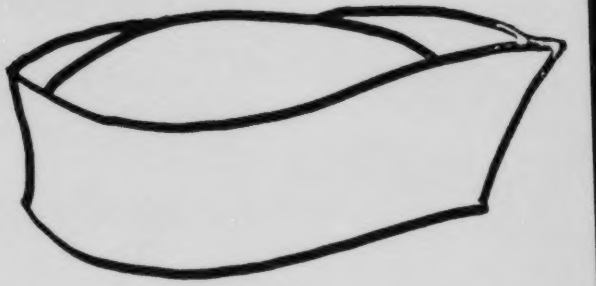
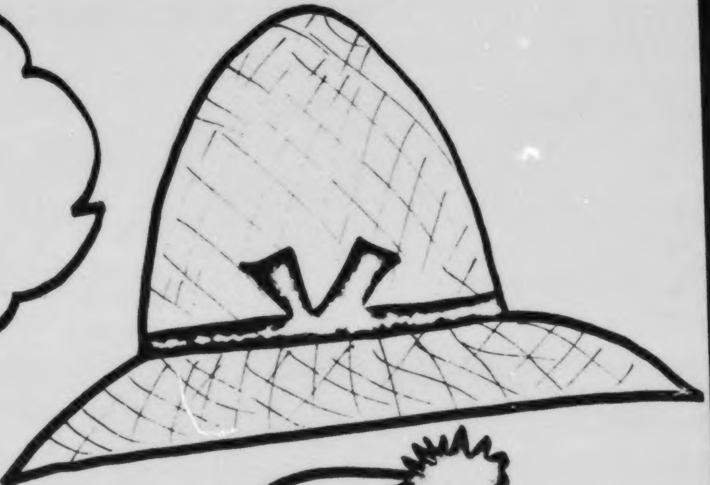
LIST OF PATTERNS

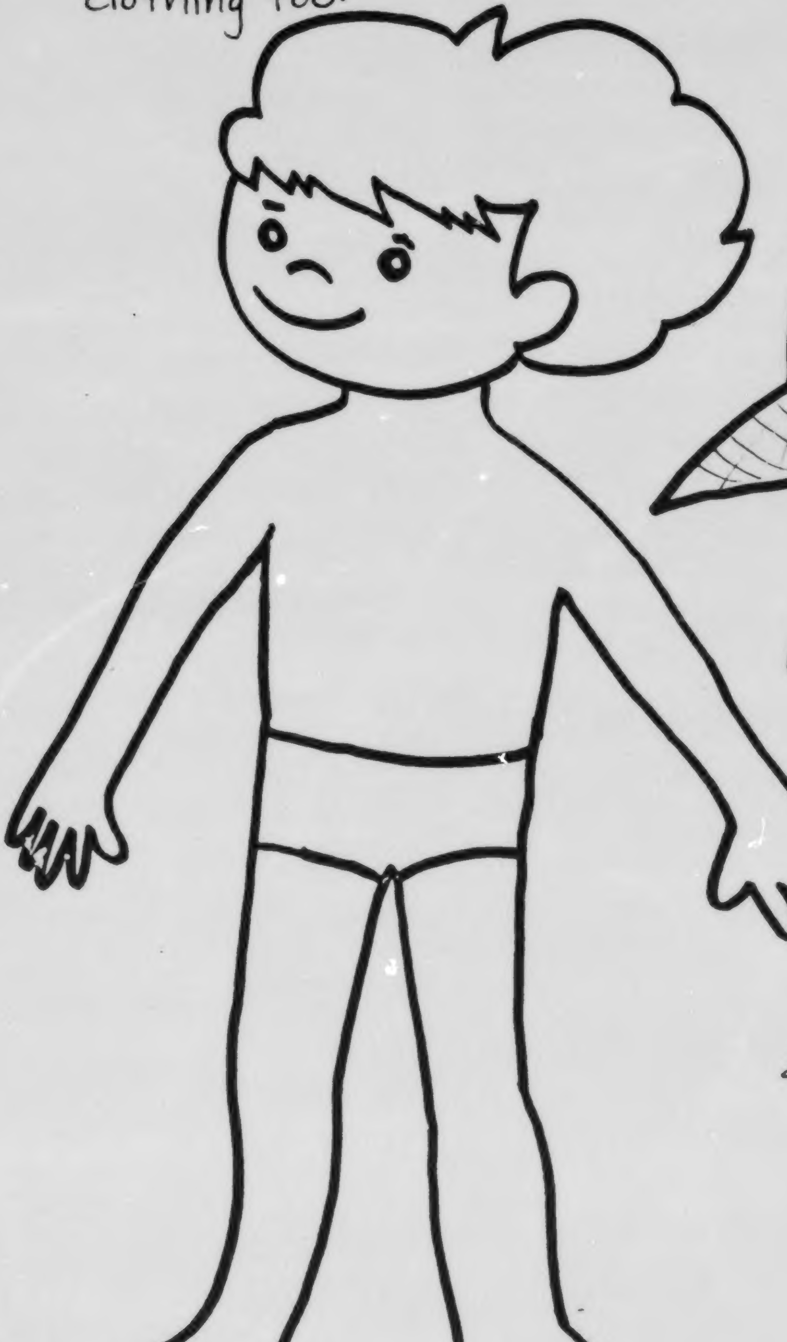
Clothing Categories
Magnet Fishing
Help The Puppy Make Up His Face
Cowboys and Cowgirls
Friendly Octopus
Teddy Bear
Magnet Cars
Number Partners
Old Woman Who Lived In A Shoe
Lady Bug Math
Pinnochinose
Mr. Freckles
Teeny Tiny Bubbles
Playdough Numerals
Smurfy Dress Up
Turkey Tails
Go-Togethers
Number Patterns
Snail's Pace
Road Race
Ups 'n' Downs
Monster Shapes
A "Me" Book
Ice Cream Cones
Bears That Love Hamburgers
Arrays
Sharing Games
Pupil Poll
Weather Watch
Number, Please
Bertha Bird
Soap Bubbles
Popcorn
Peanut Butter Balls
Numeral Pancakes
Playdough

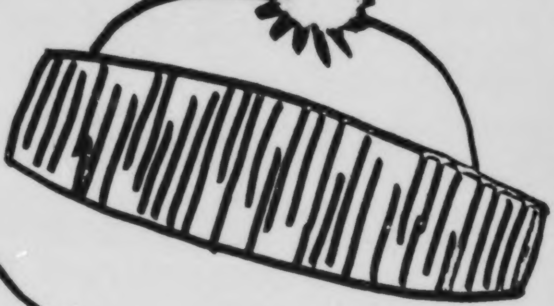
Clothing Categories

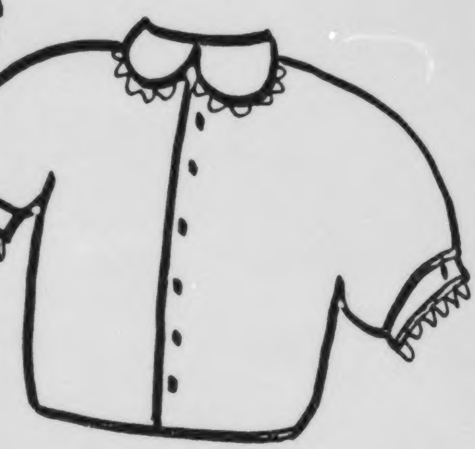
Modify the figure's hairstyle to suggest a boy or girl if you wish. Add other clothing too.

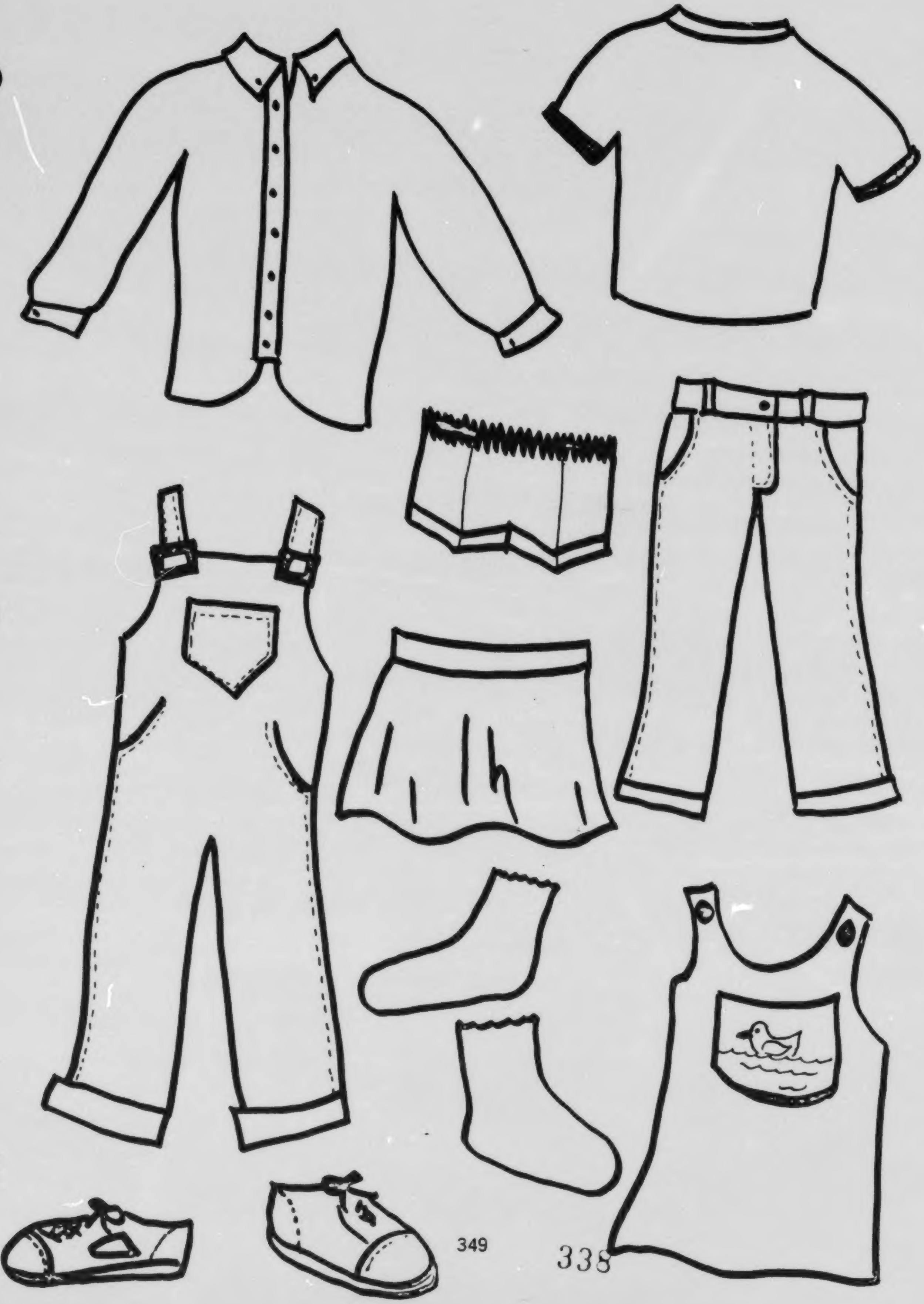




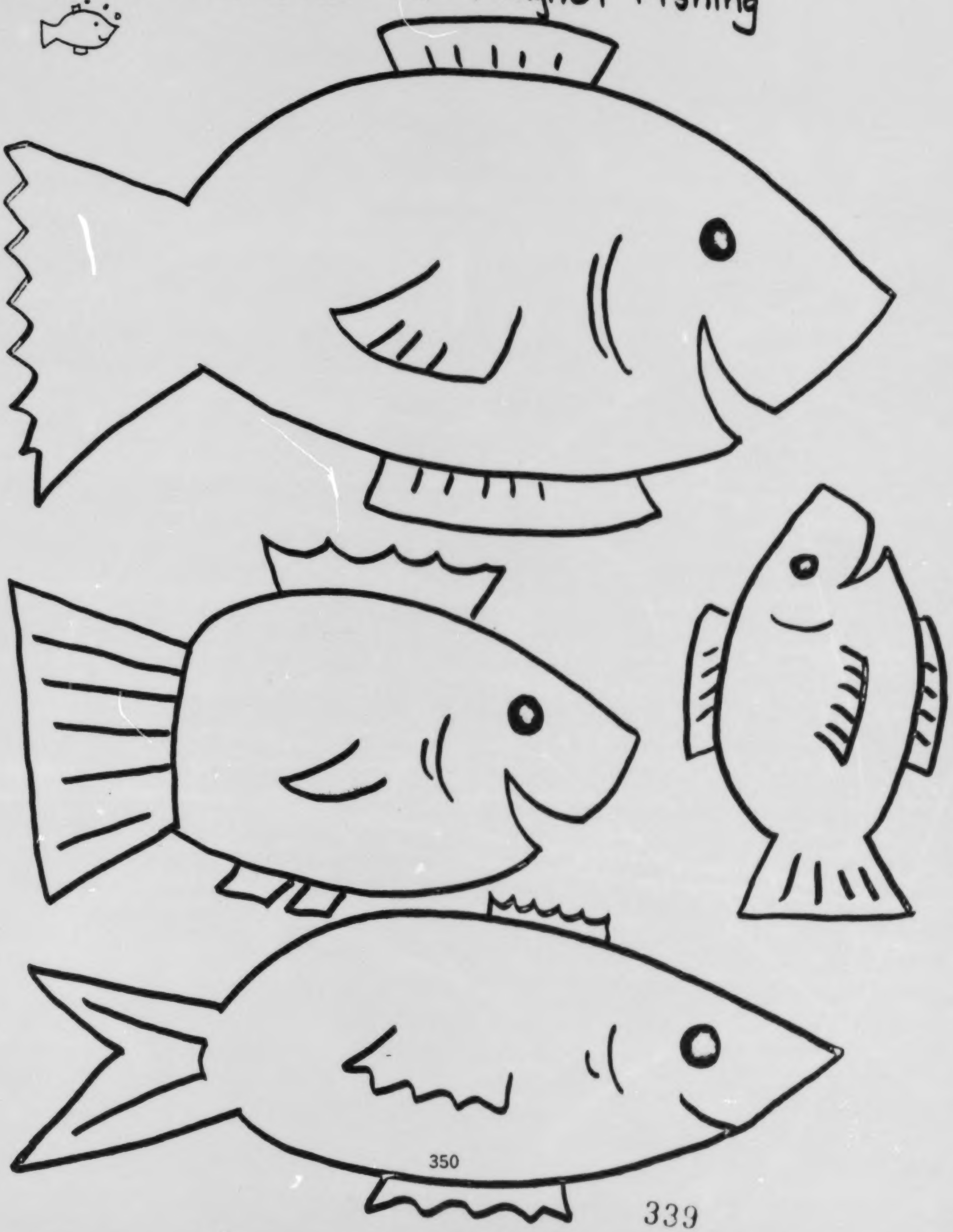


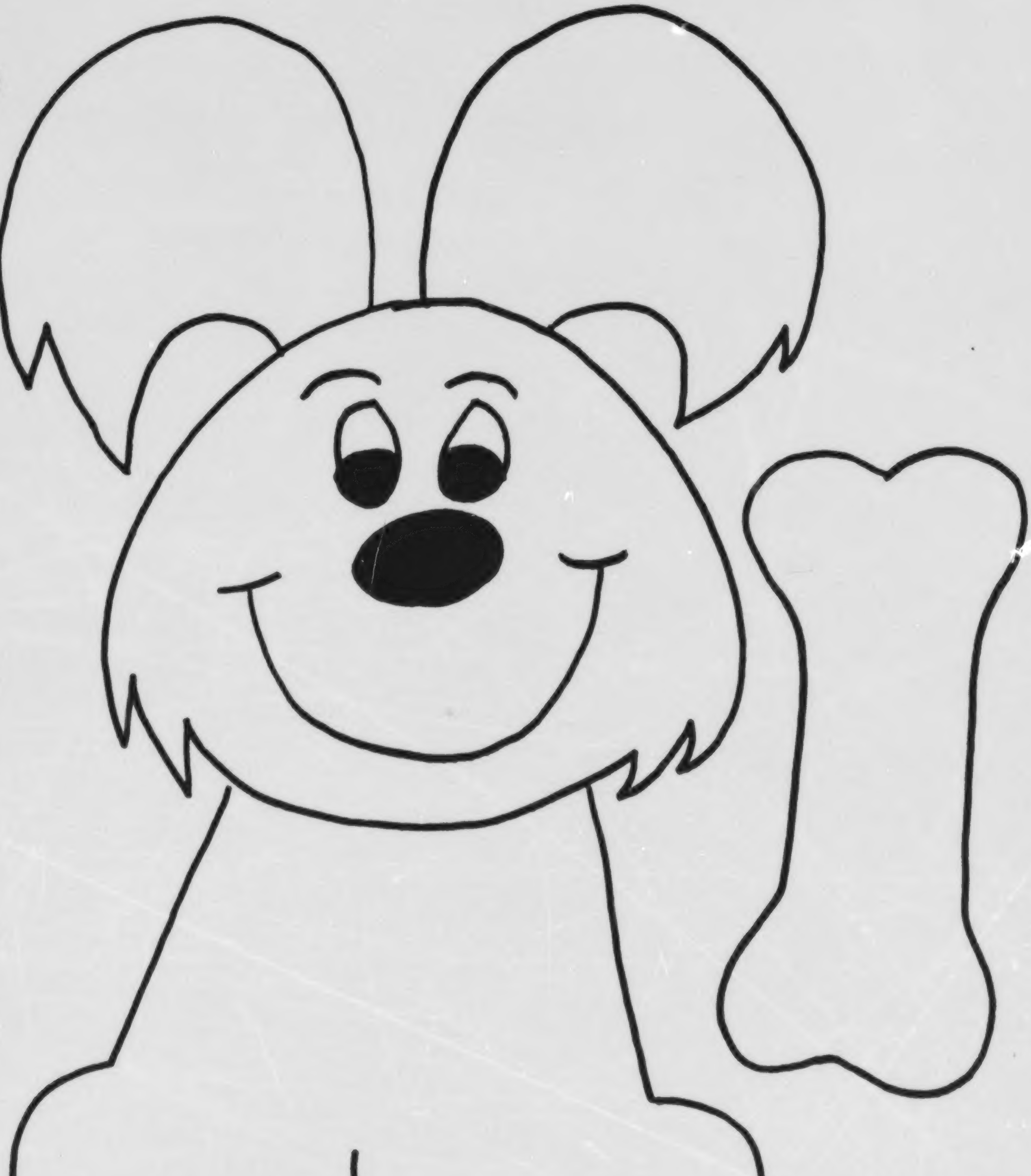




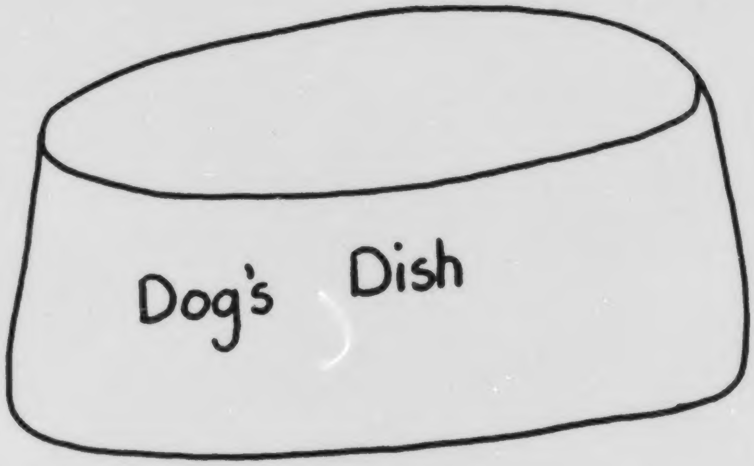


FISH Patterns for Magnet Fishing

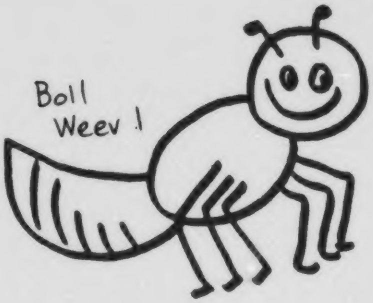


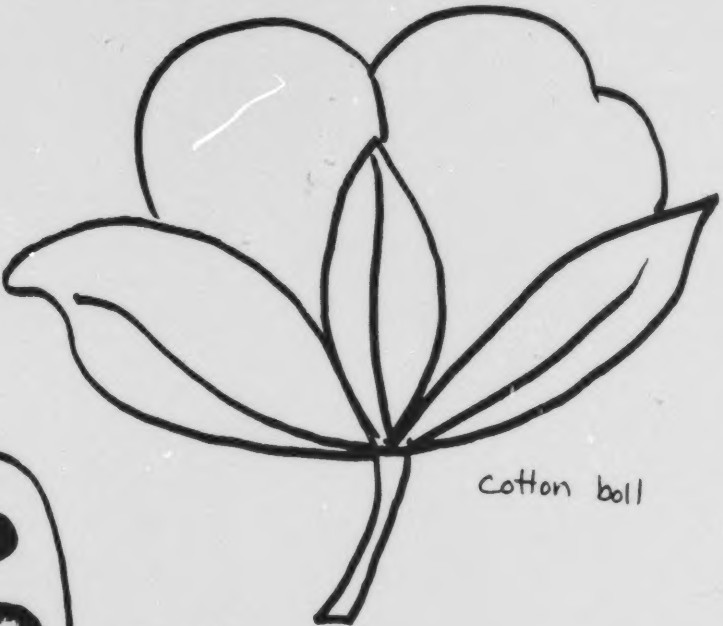


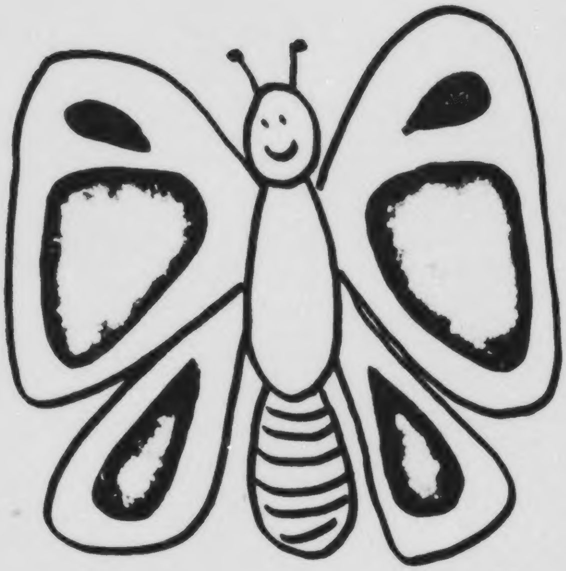
Help Puppy Make Up Mind

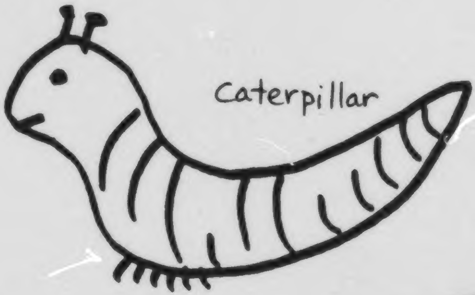

Dog's Dish

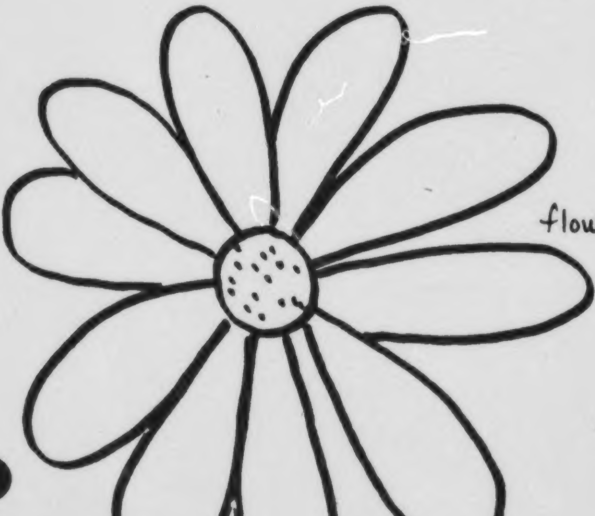
Boll Weevils and other Critters

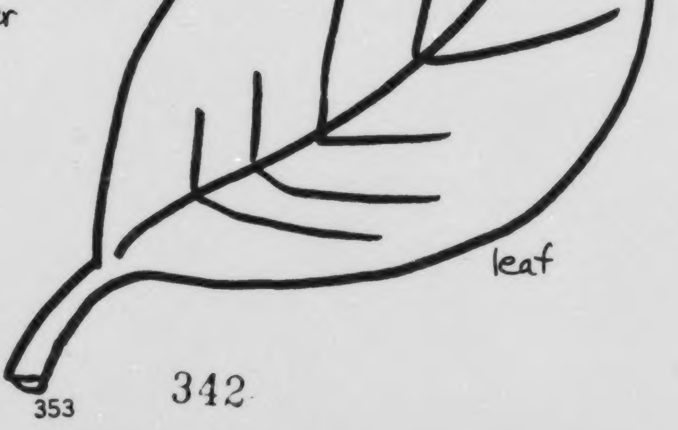

Boll
Weevil


cotton boll

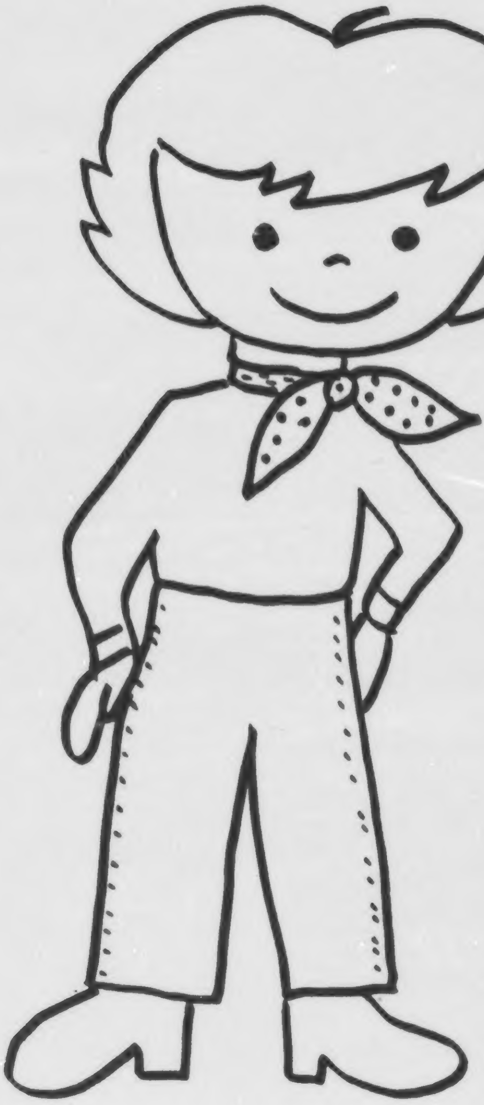


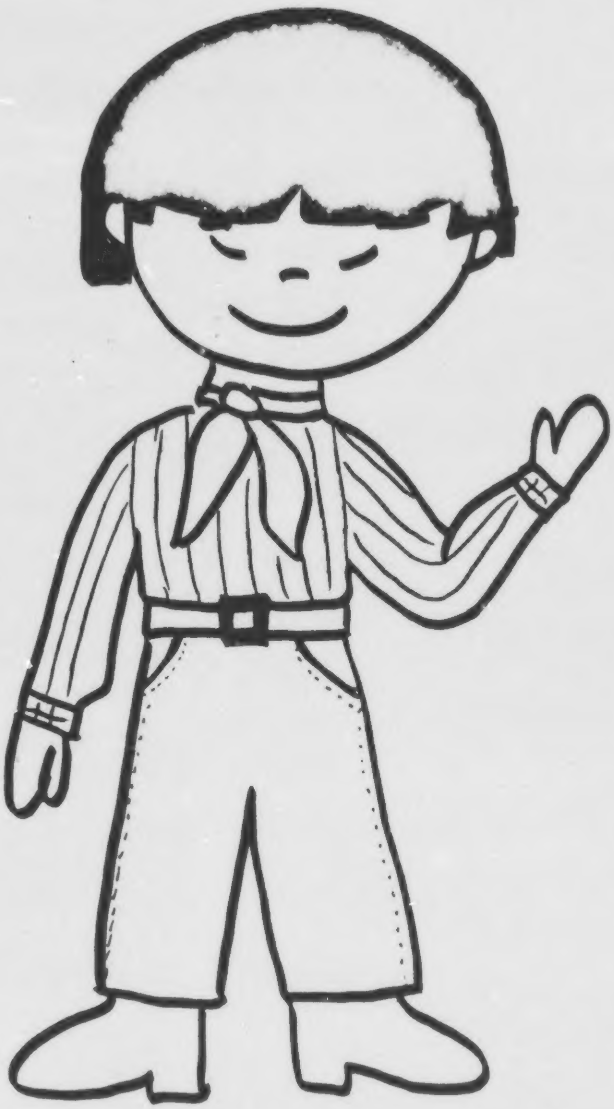

caterpillar

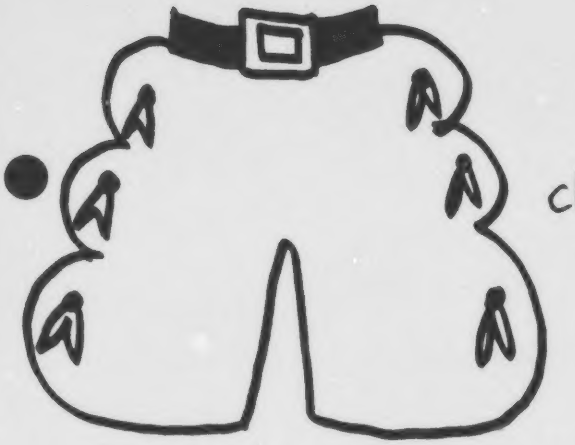




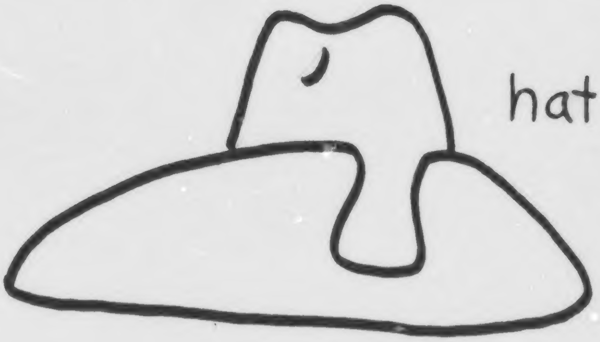
COWBOYS and COWGIRLS



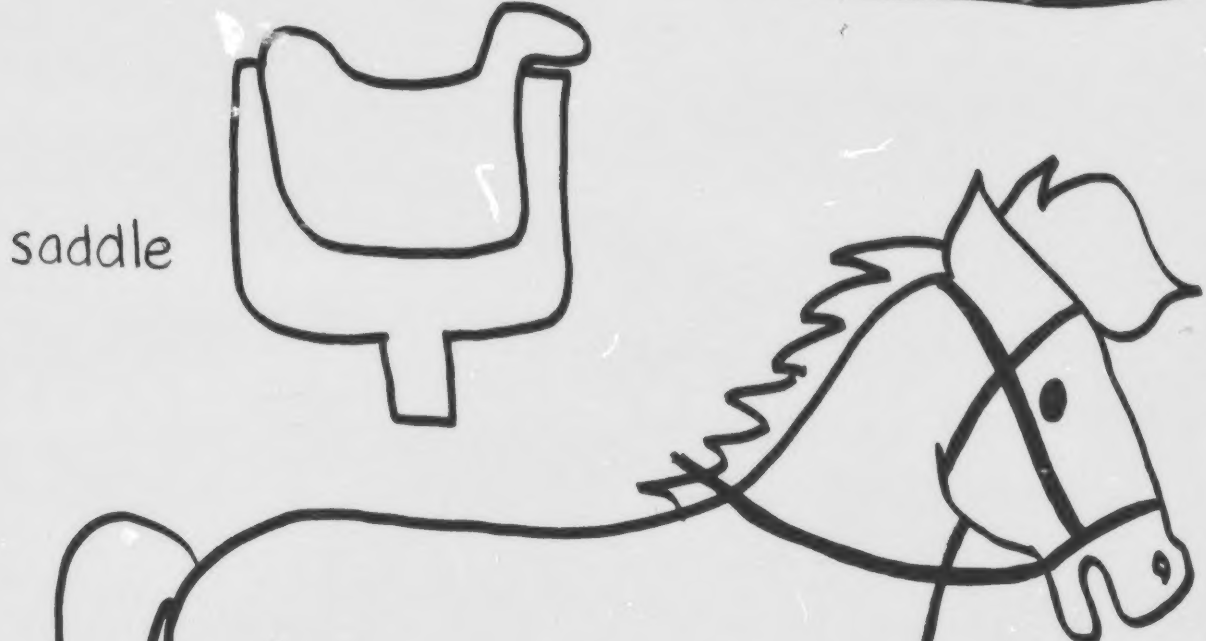




chaps



hat

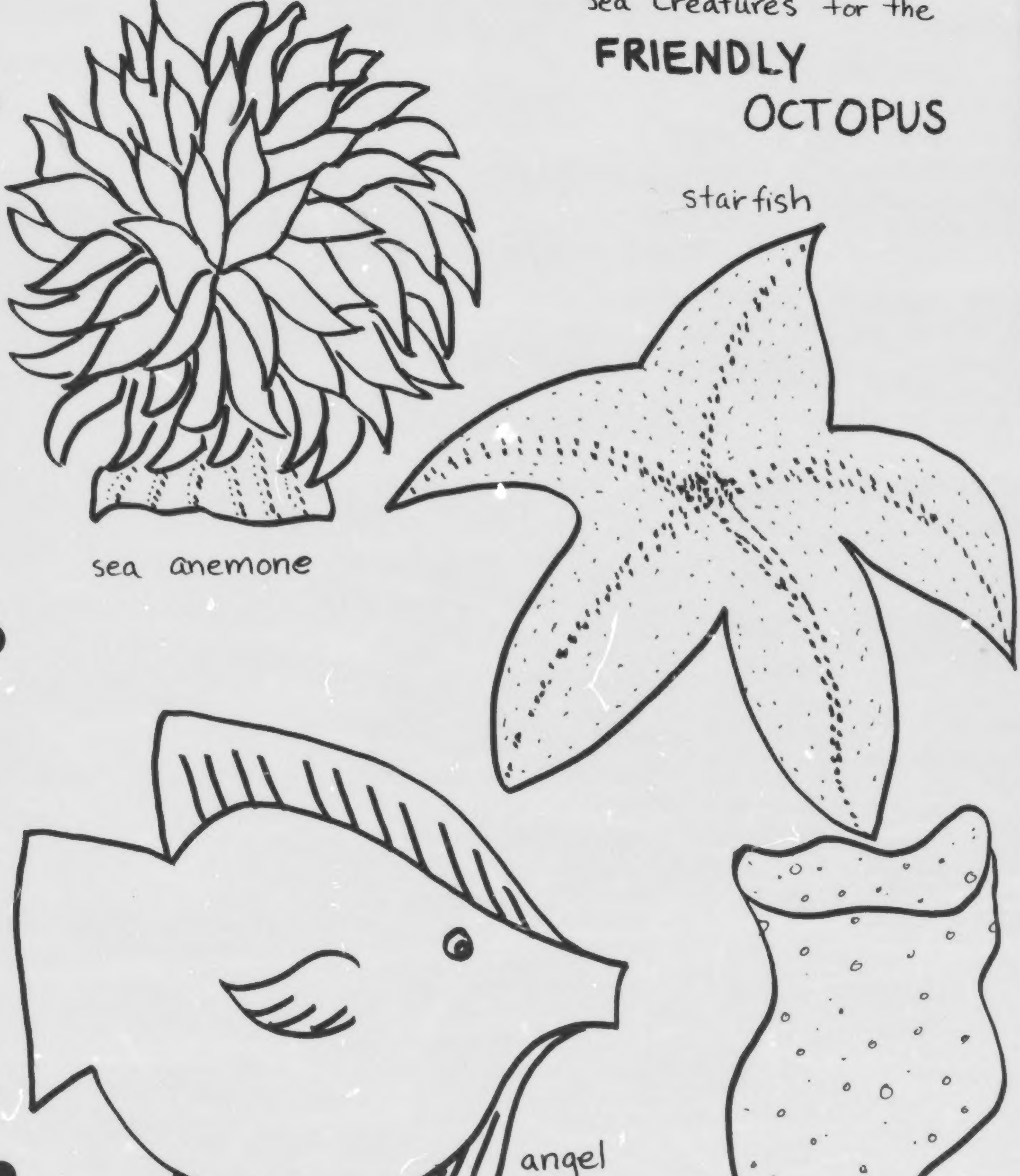


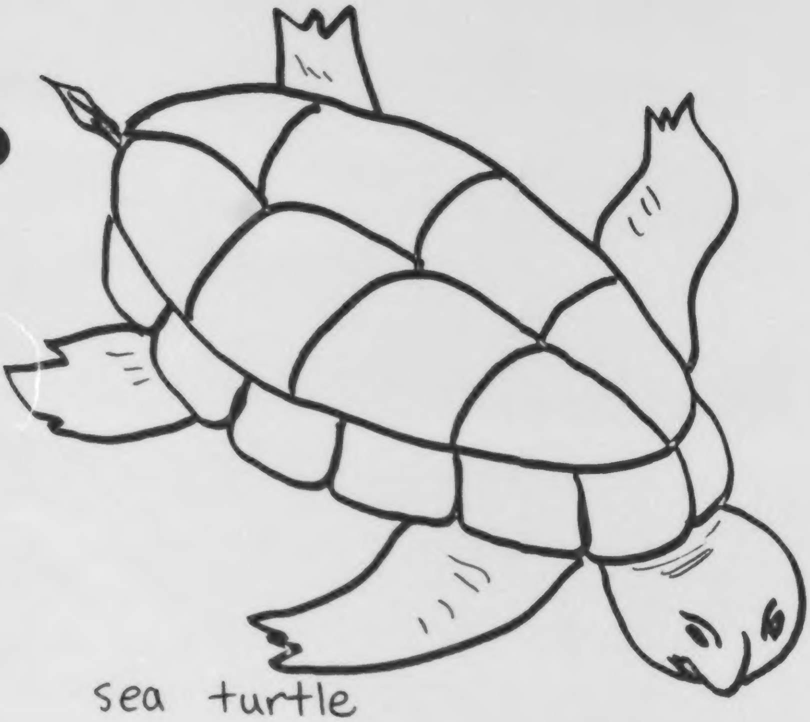
saddle

horse

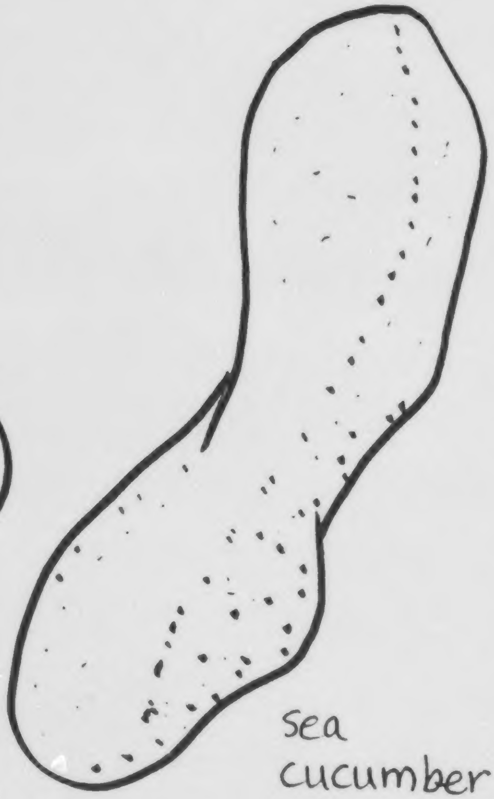
Sea Creatures for the

FRIENDLY OCTOPUS

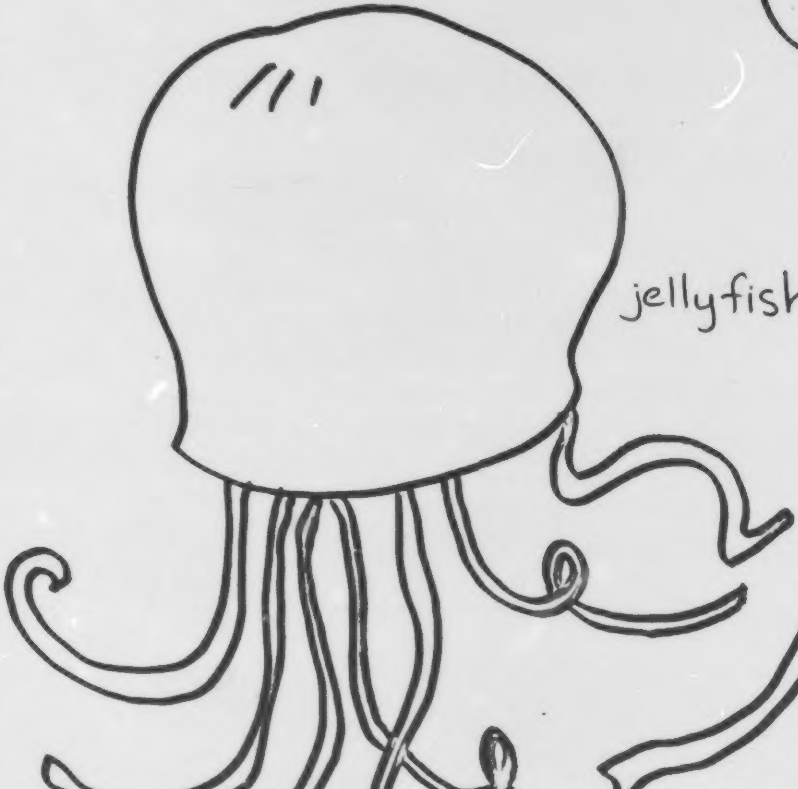

starfish
sea anemone
angel fish
sponge



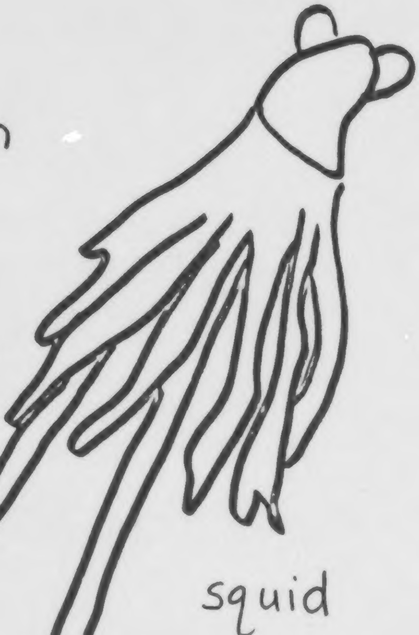
sea turtle



sea cucumber

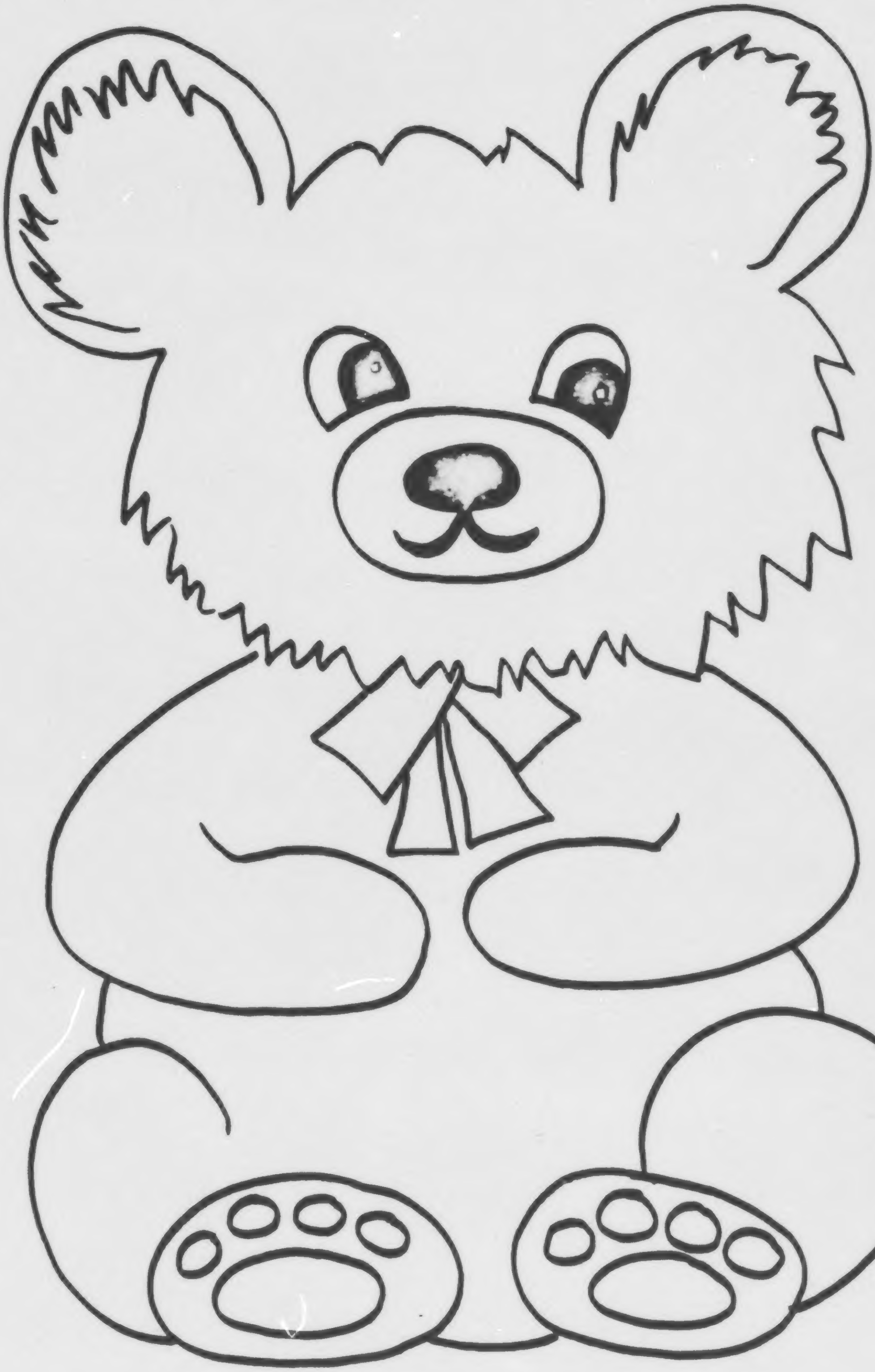


jellyfish



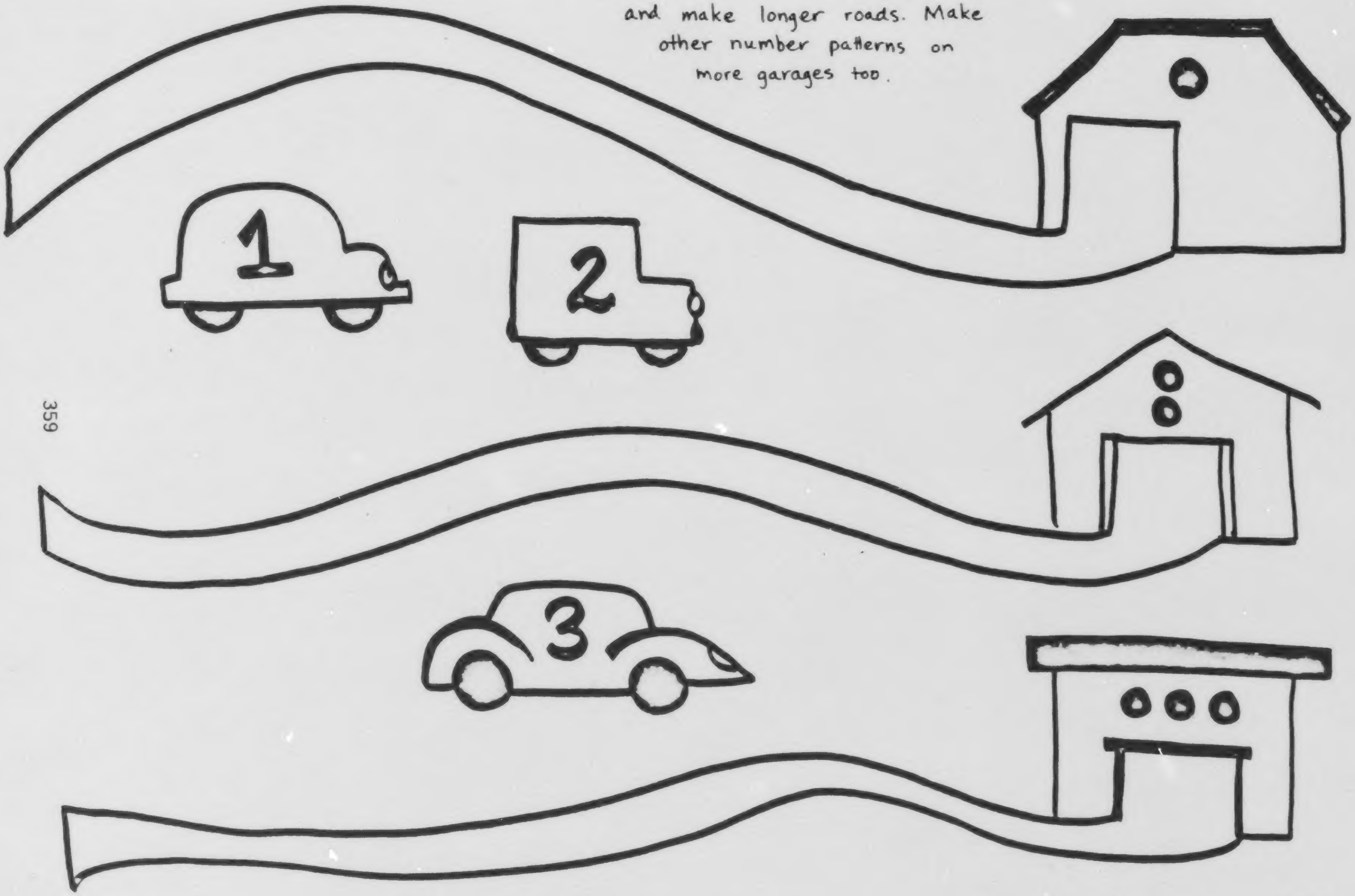
squid

TEDDY BEAR pattern



Pattern for Magnet Cars

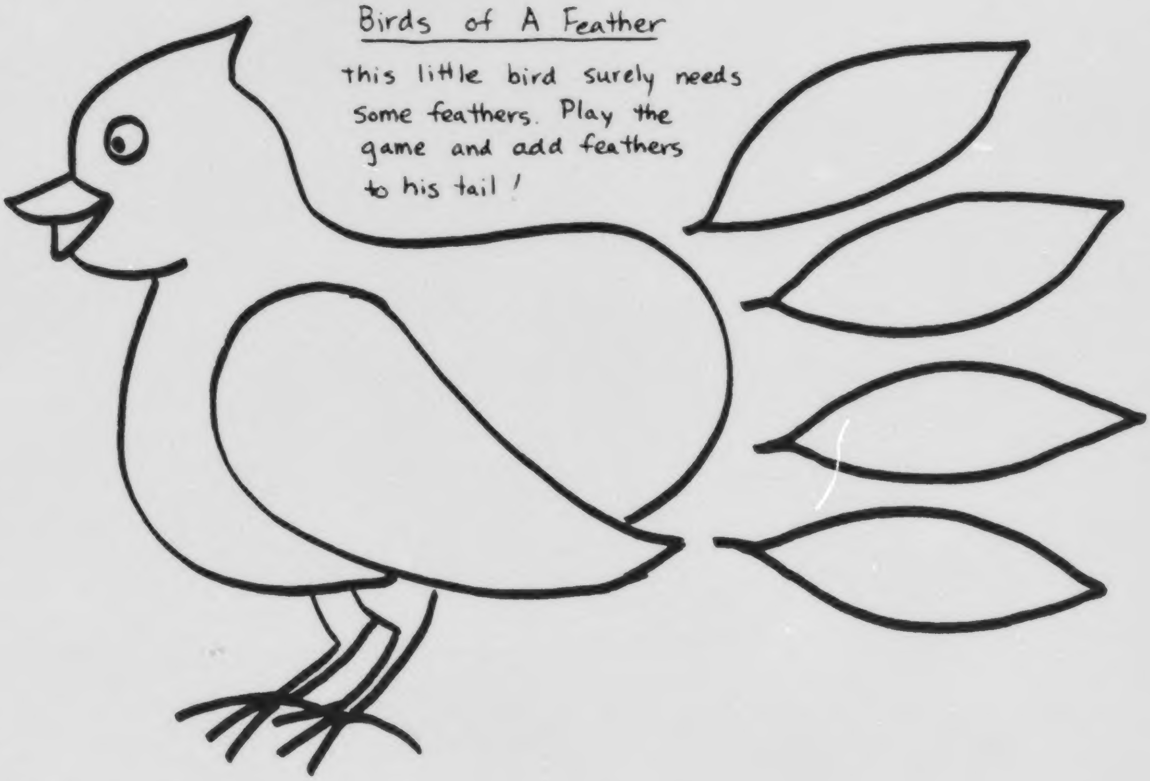
You may want to use larger paper and make longer roads. Make other number patterns on more garages too.

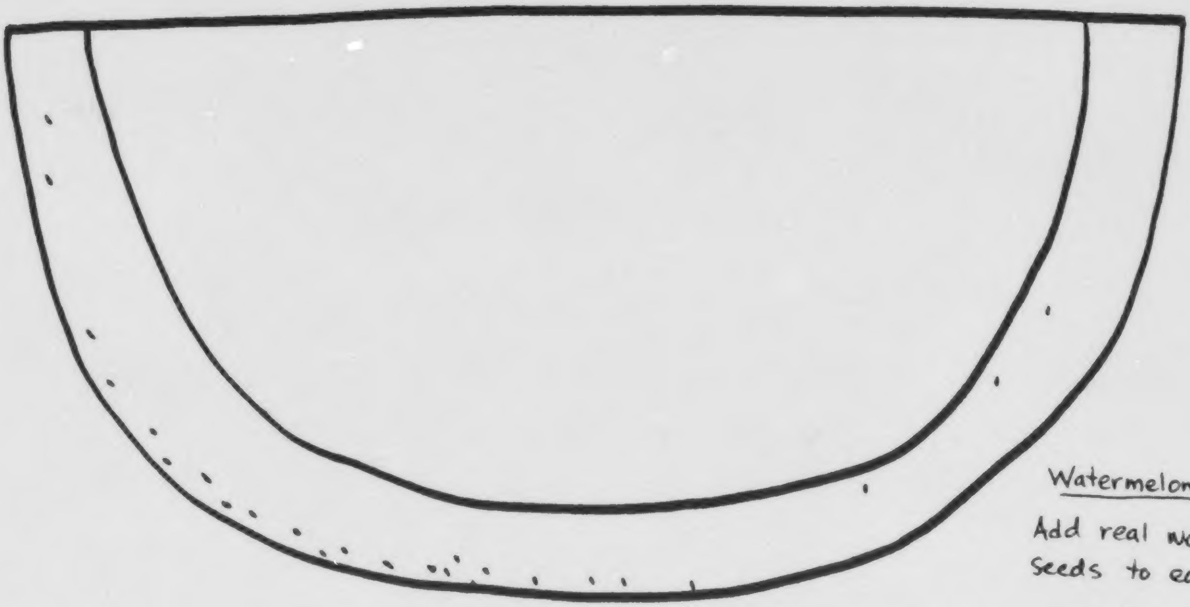


Patterns for NUMBER PARTNERS

Birds of A Feather

this little bird surely needs some feathers. Play the game and add feathers to his tail!

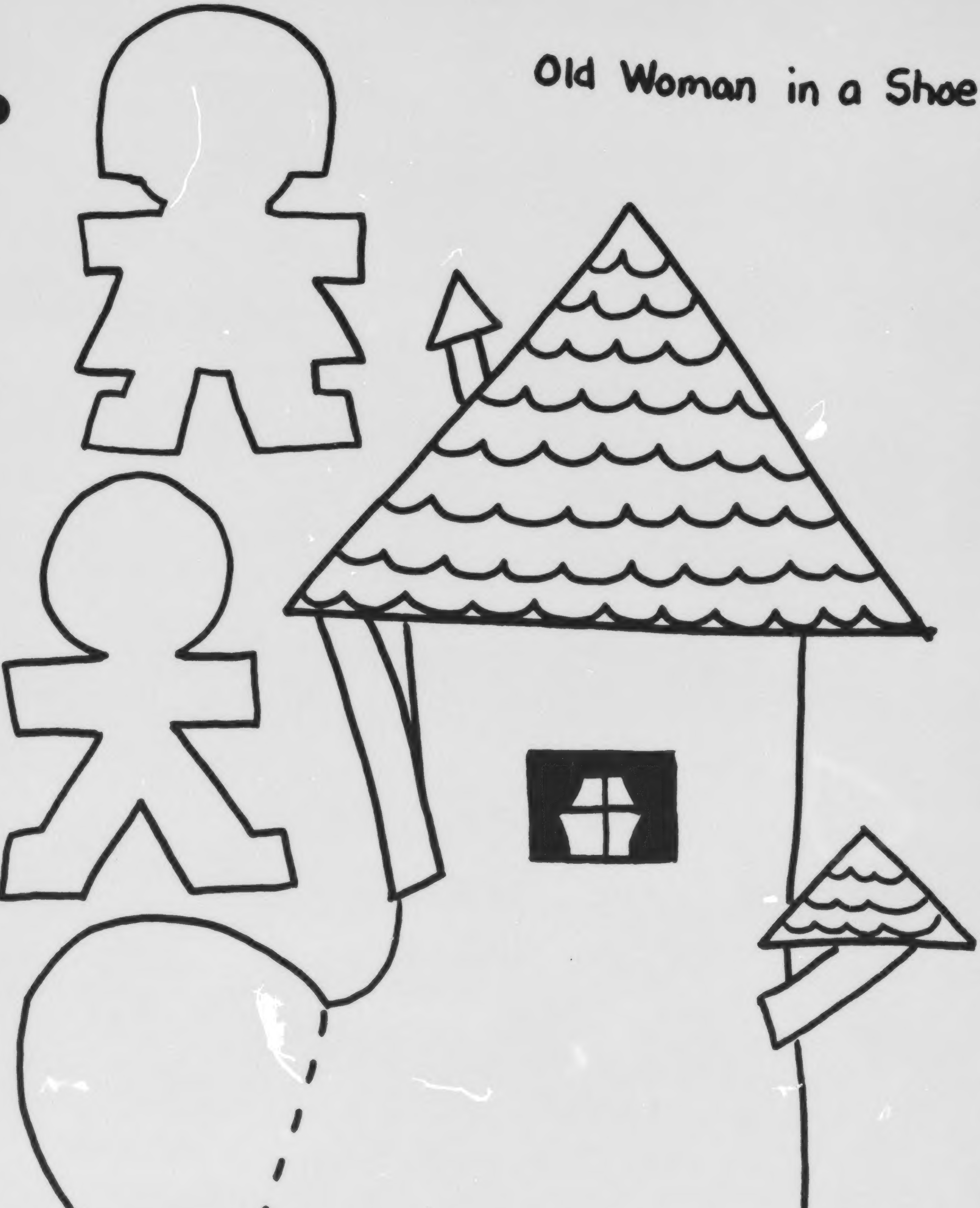


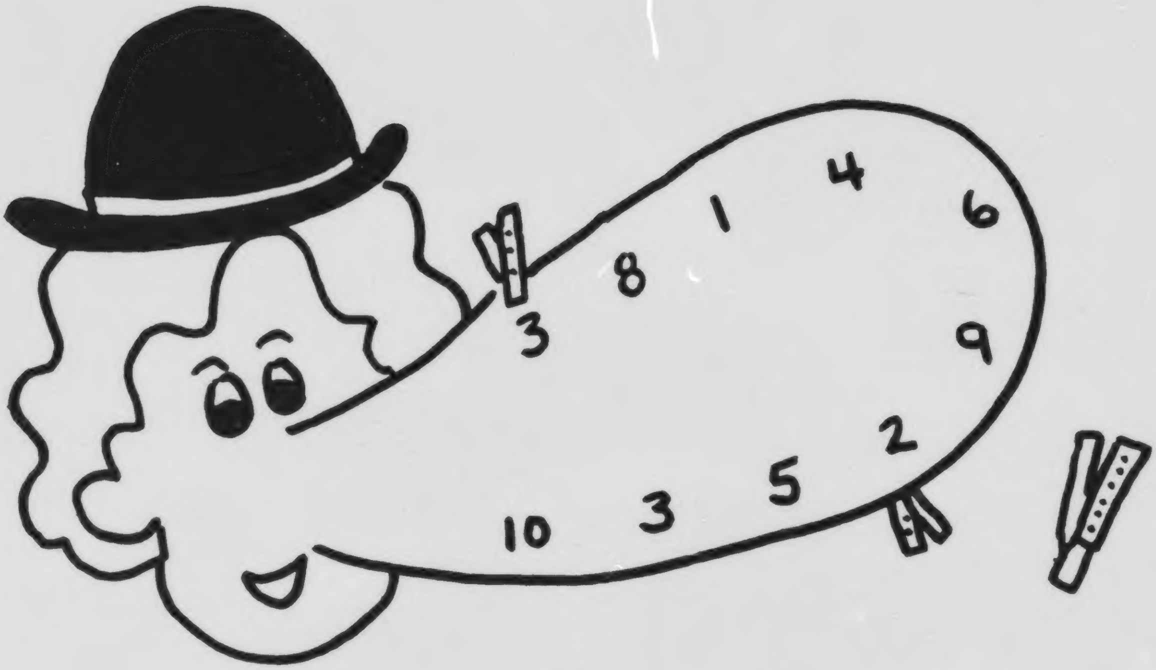


Watermelon Seeds

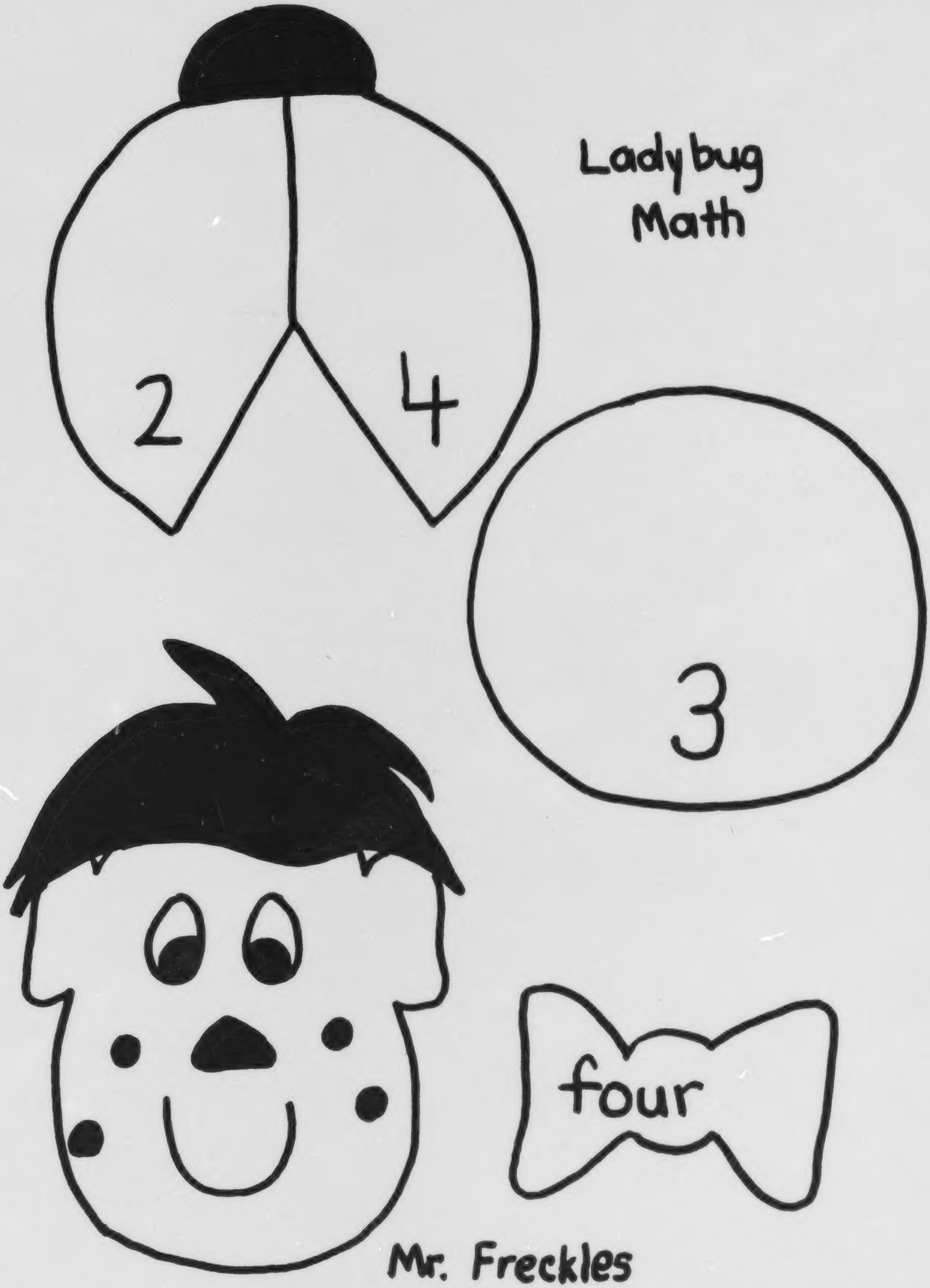
Add real watermelo seeds to each slic.

Old Woman in a Shoe

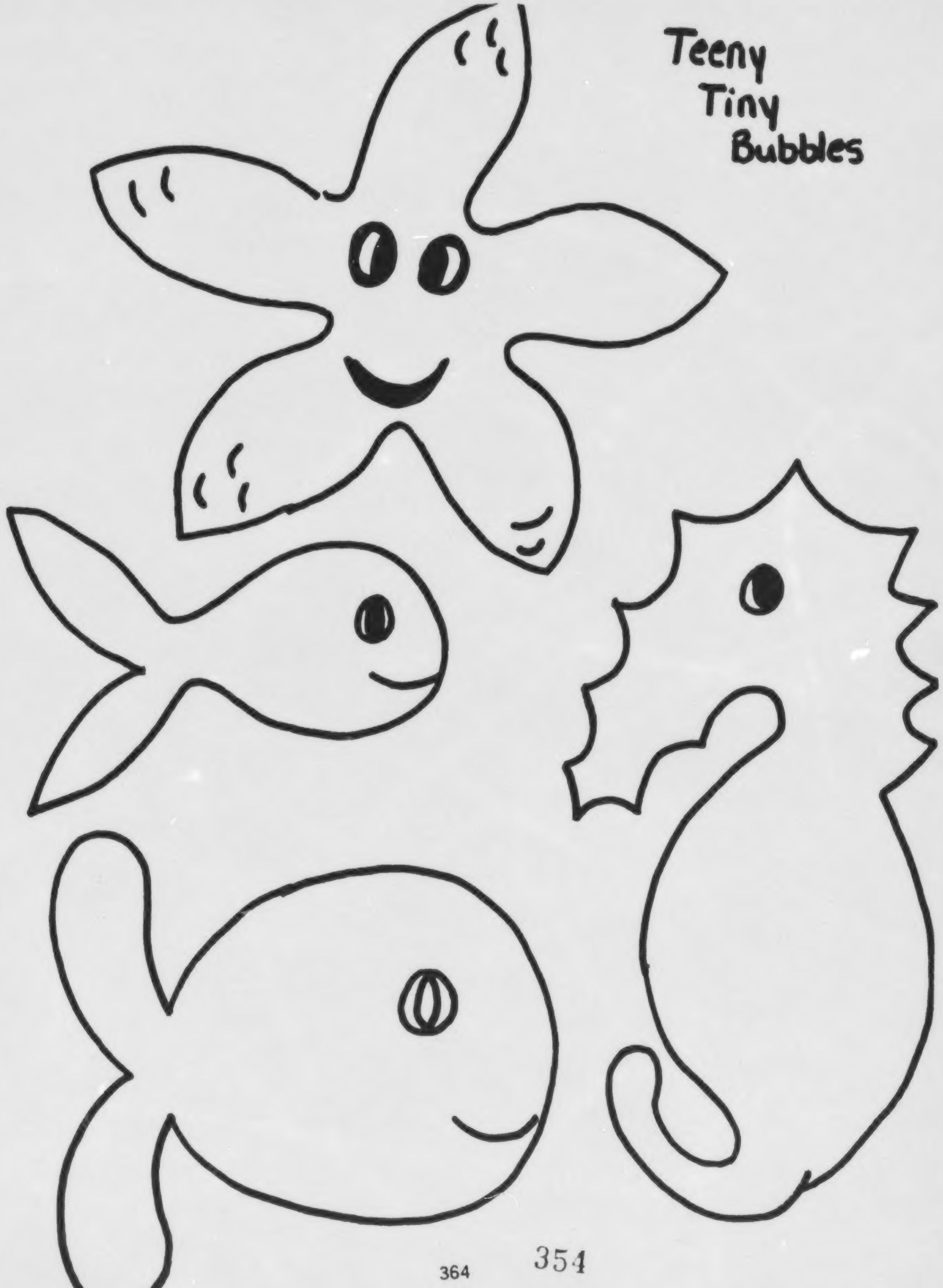


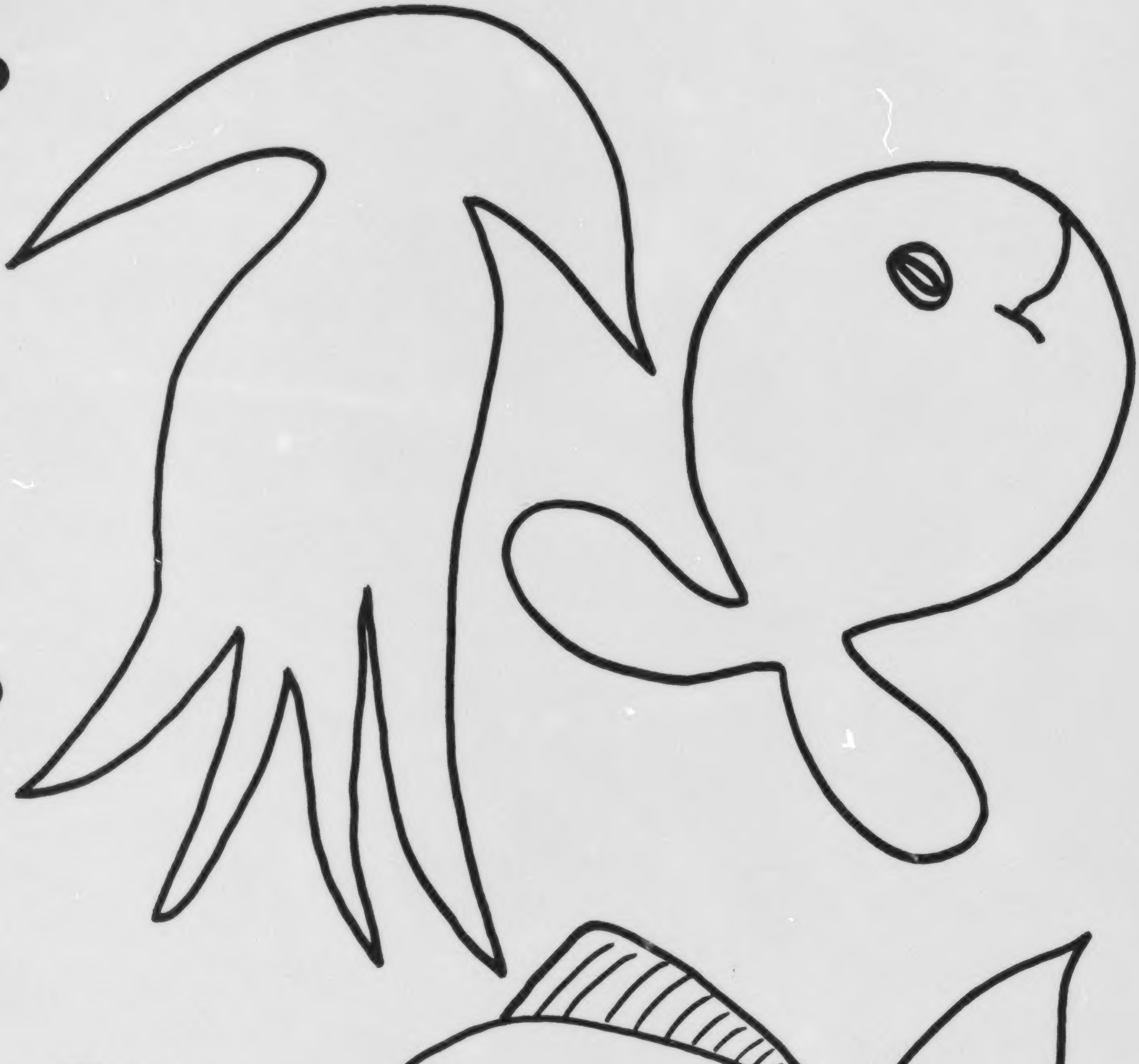

3
8
1
4
6
9
2
5
3
10

Pinnochinose
(enlarge)

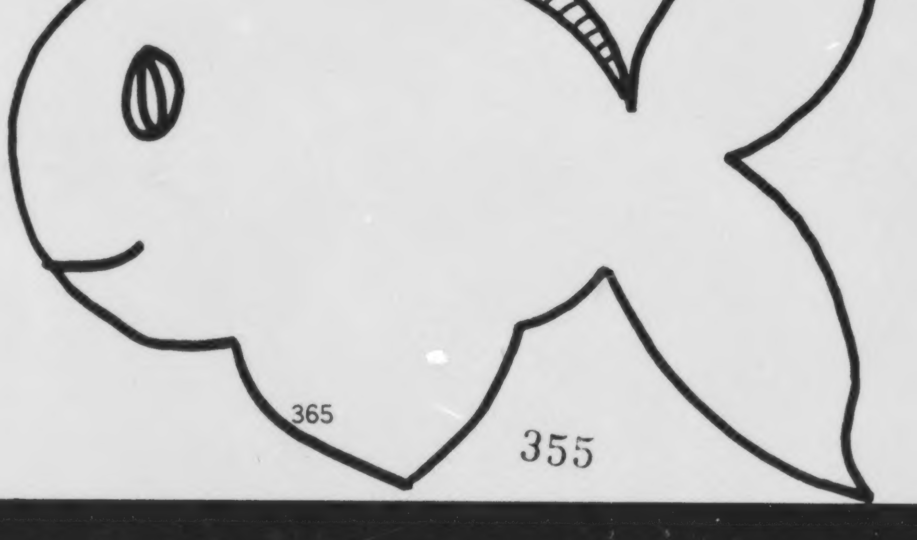

Ladybug
Math
2
4
3
four
Mr. Freckles

Teeny Tiny Bubbles



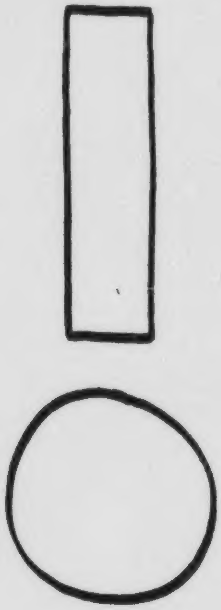


Teeny
Tiny
Bubbles

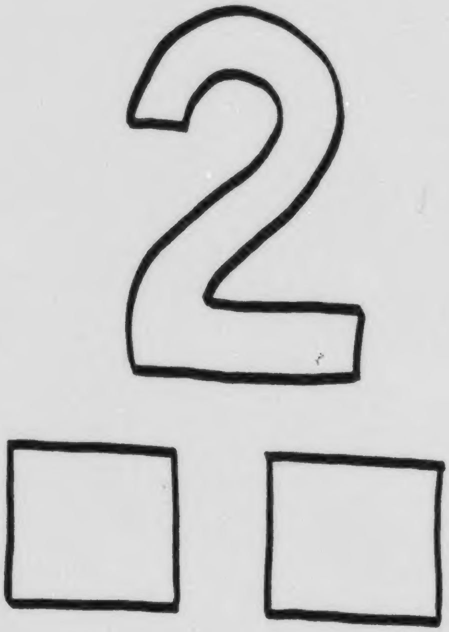


PLAYDOUGH NUMERAL CARDS

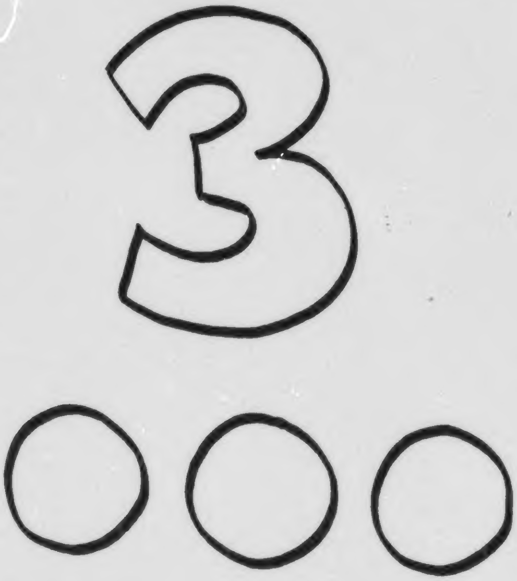
Make other cards and geometric shapes.



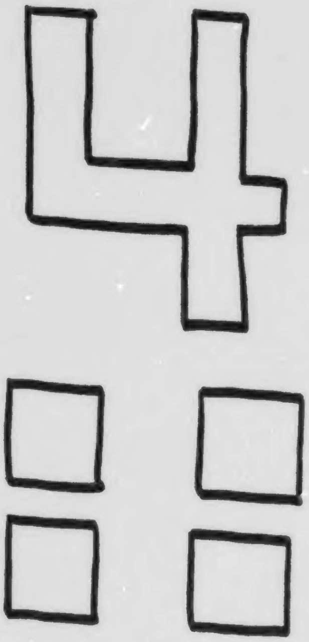
one



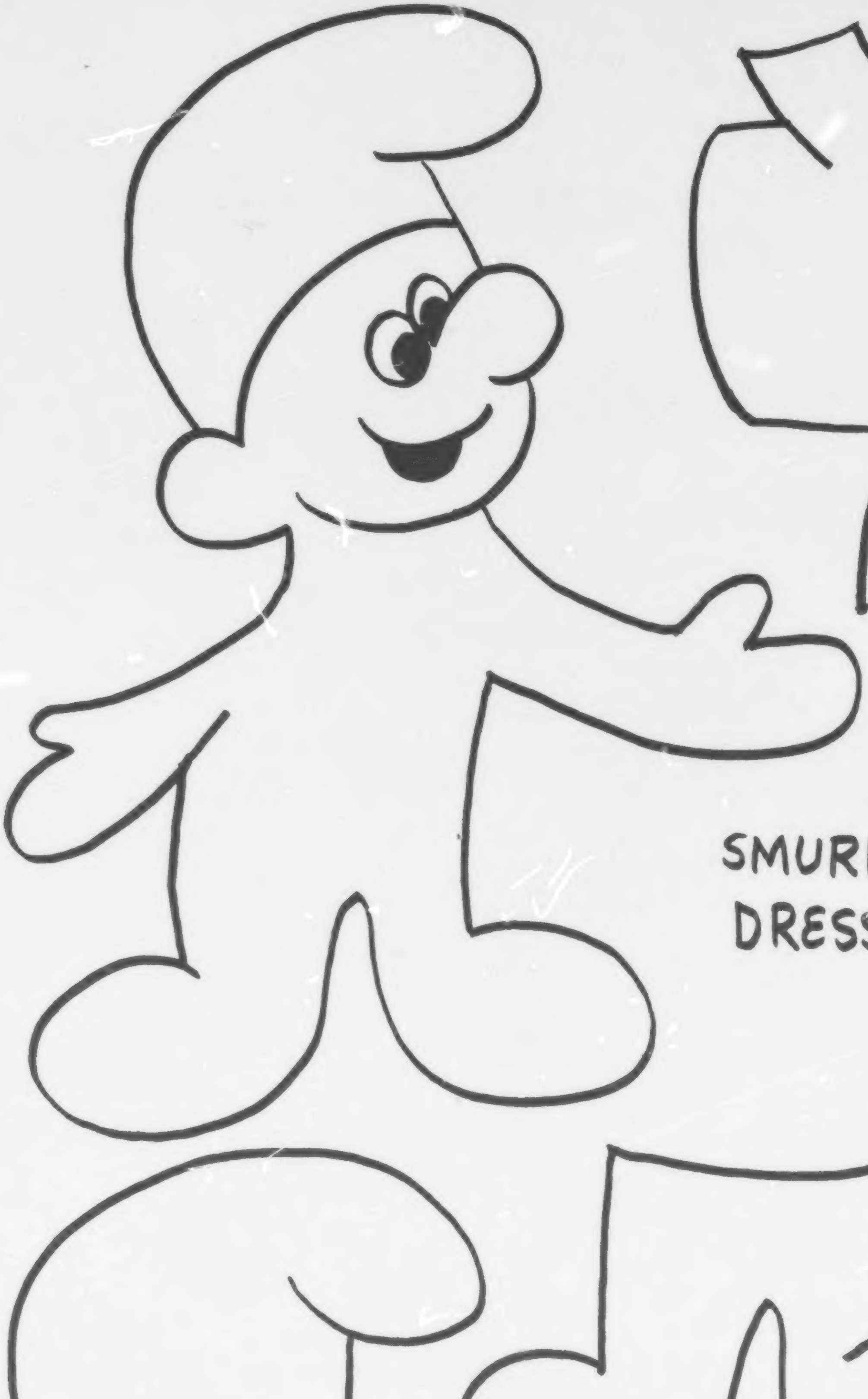
two

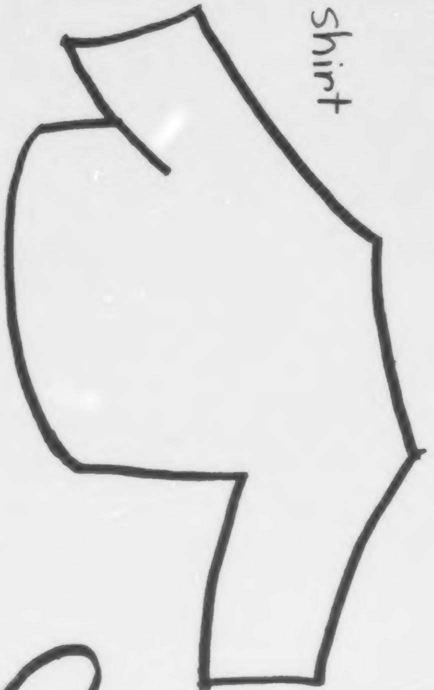


three

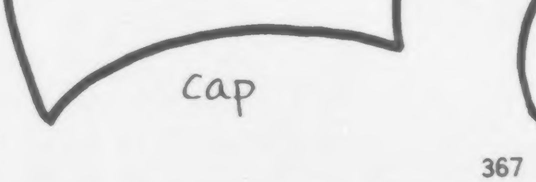


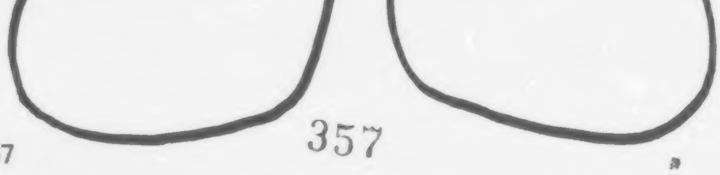
four

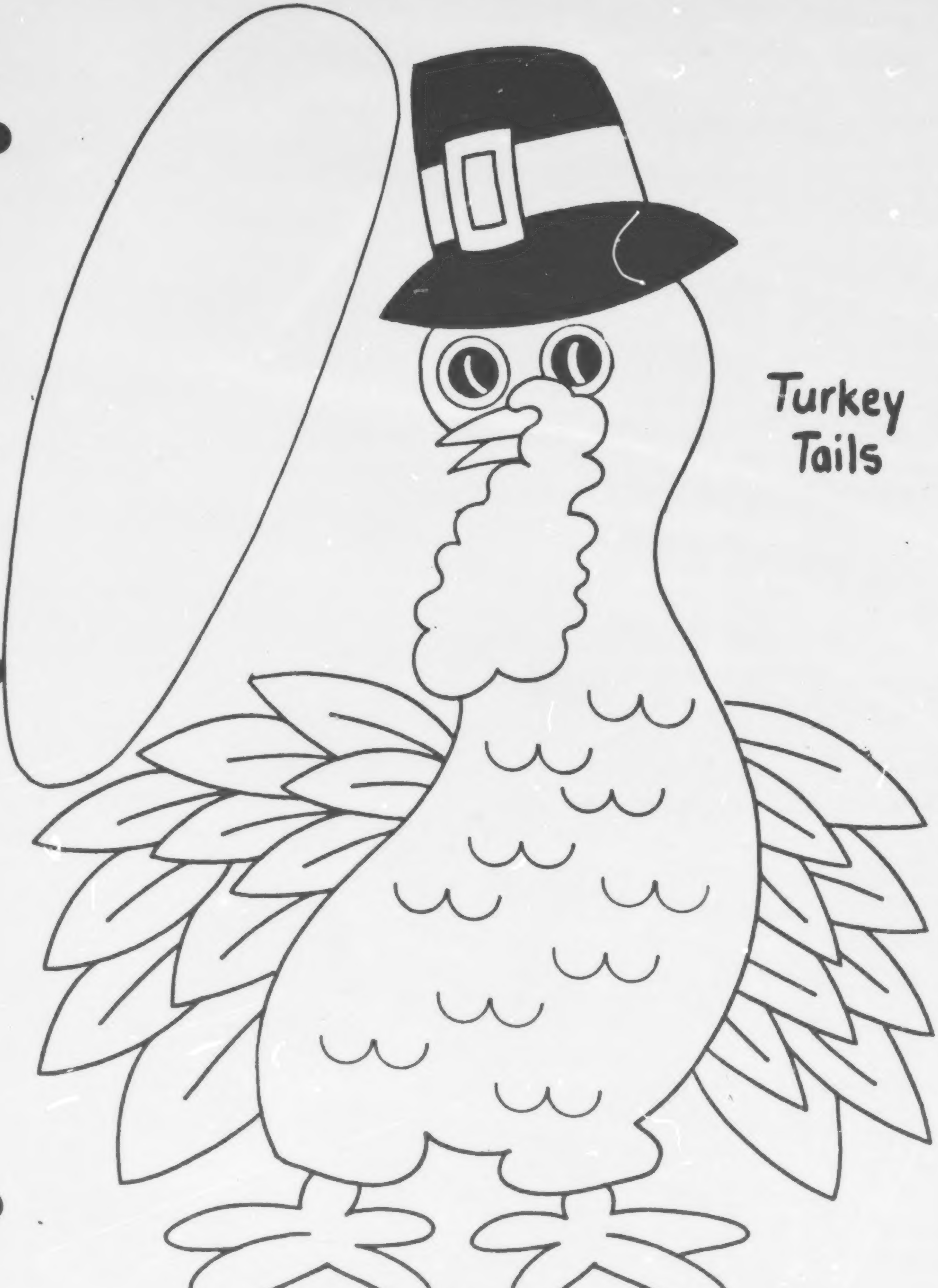




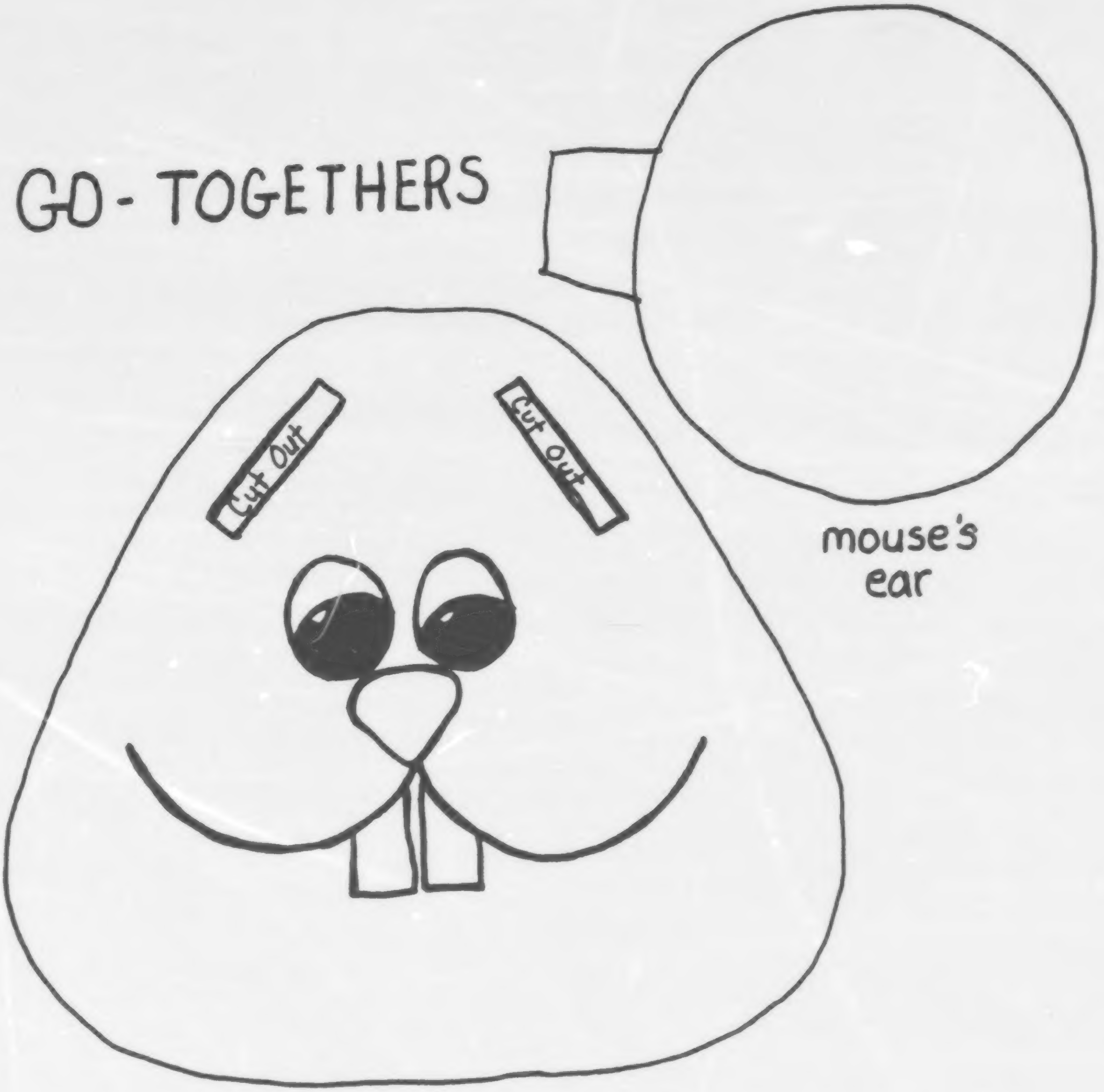
SMURFY DRESS UP



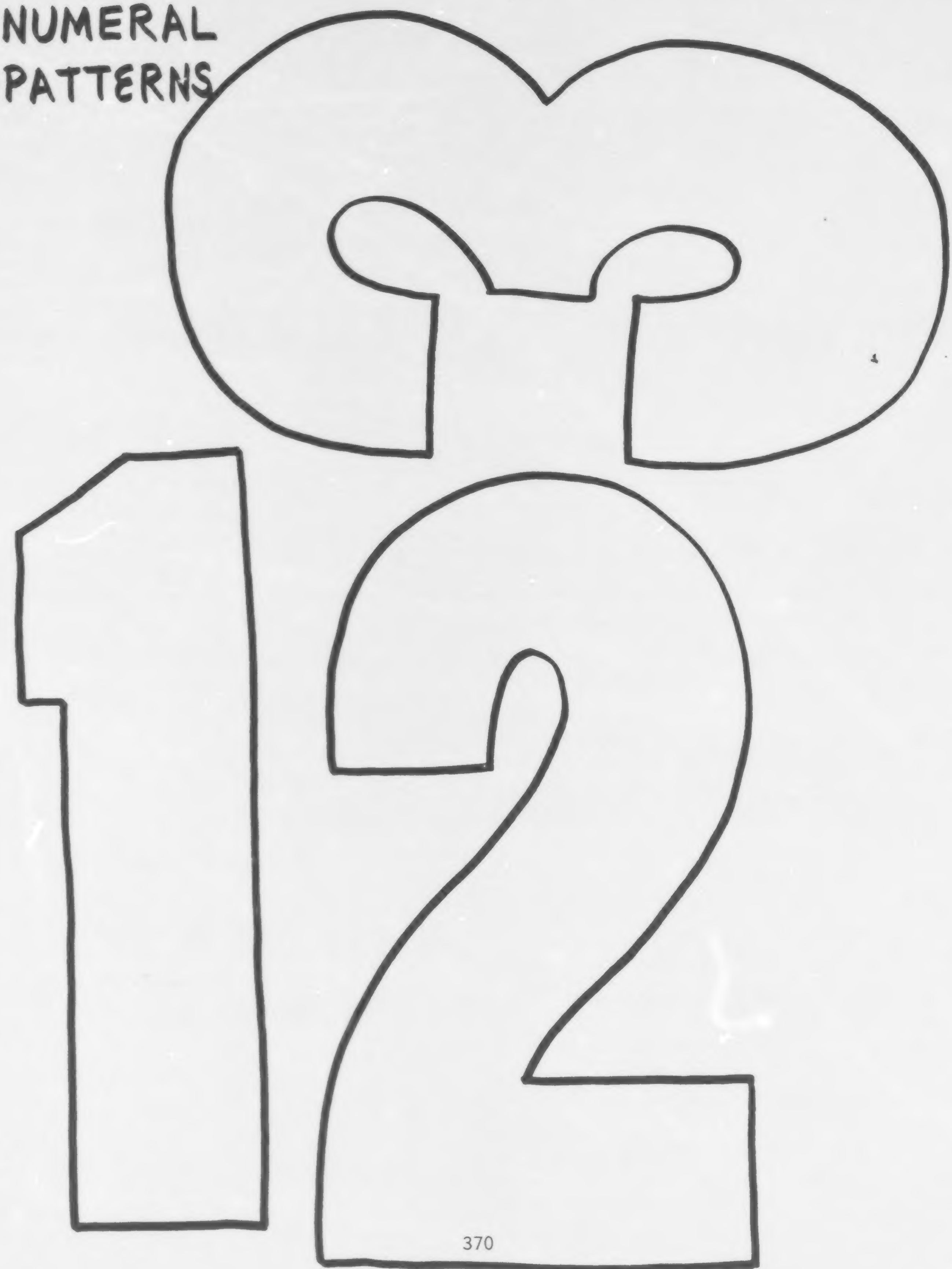


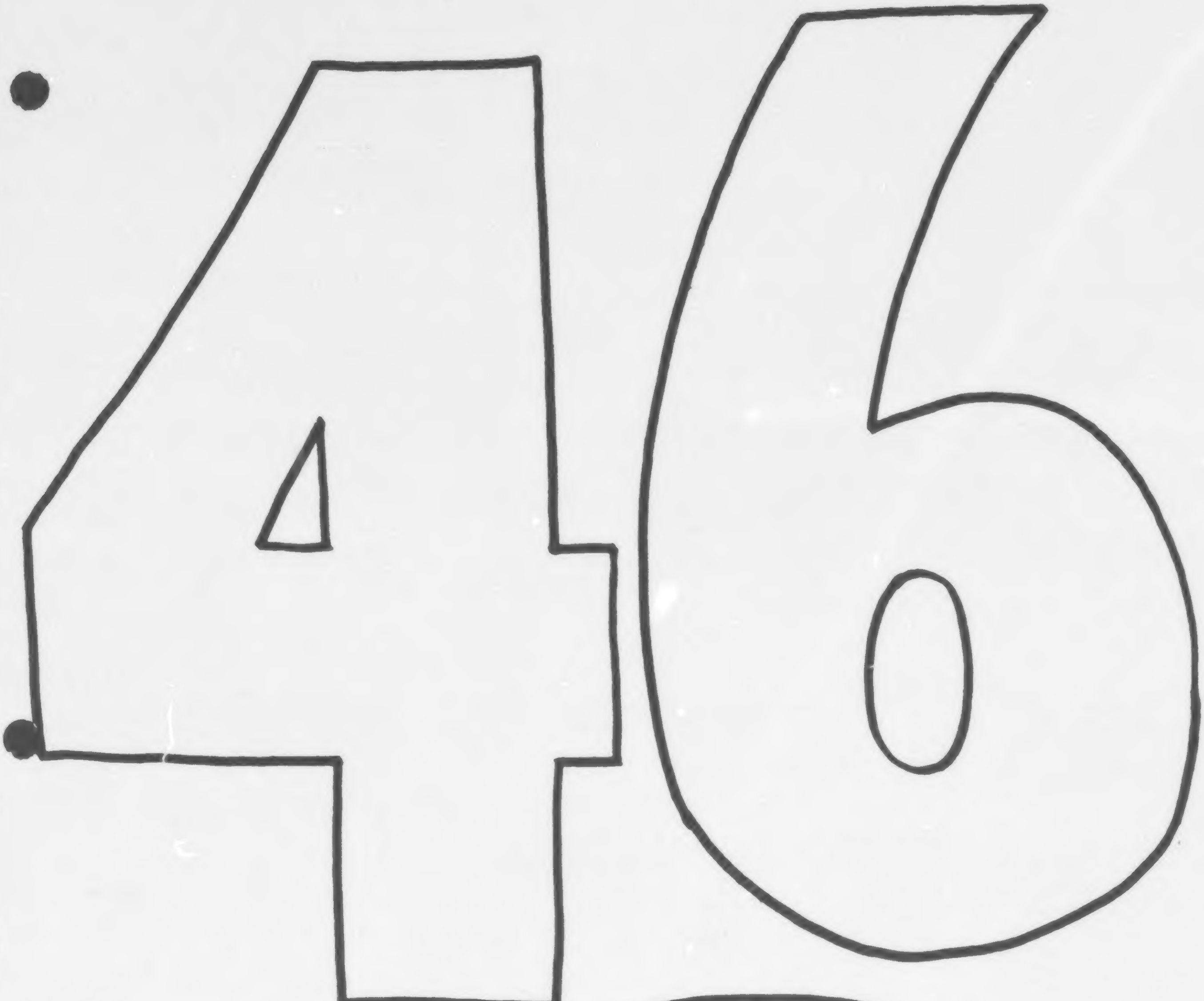

Turkey
Tails

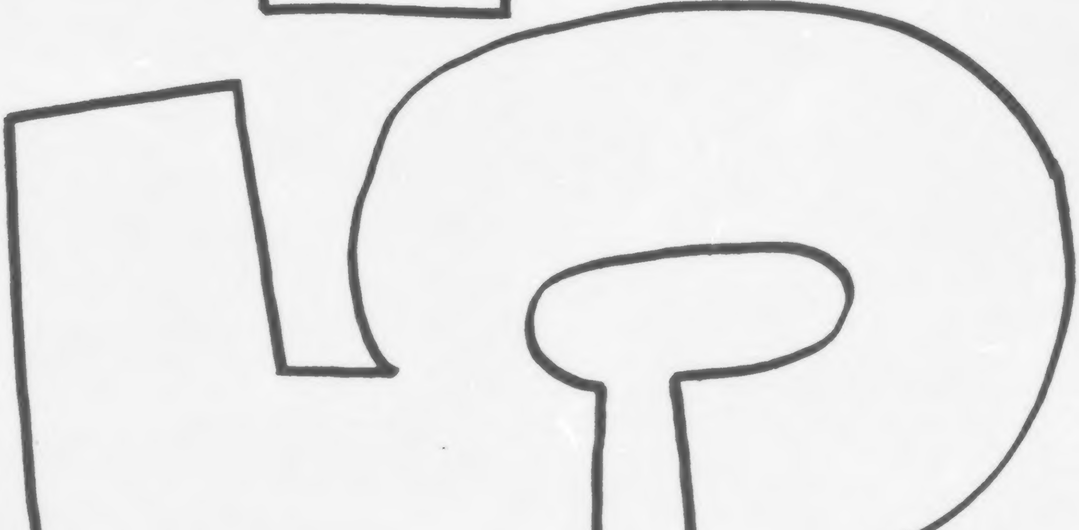
GO- TOGETHERS


Cut Out
Cut Out
mouse's ear

NUMERAL
PATTERNS

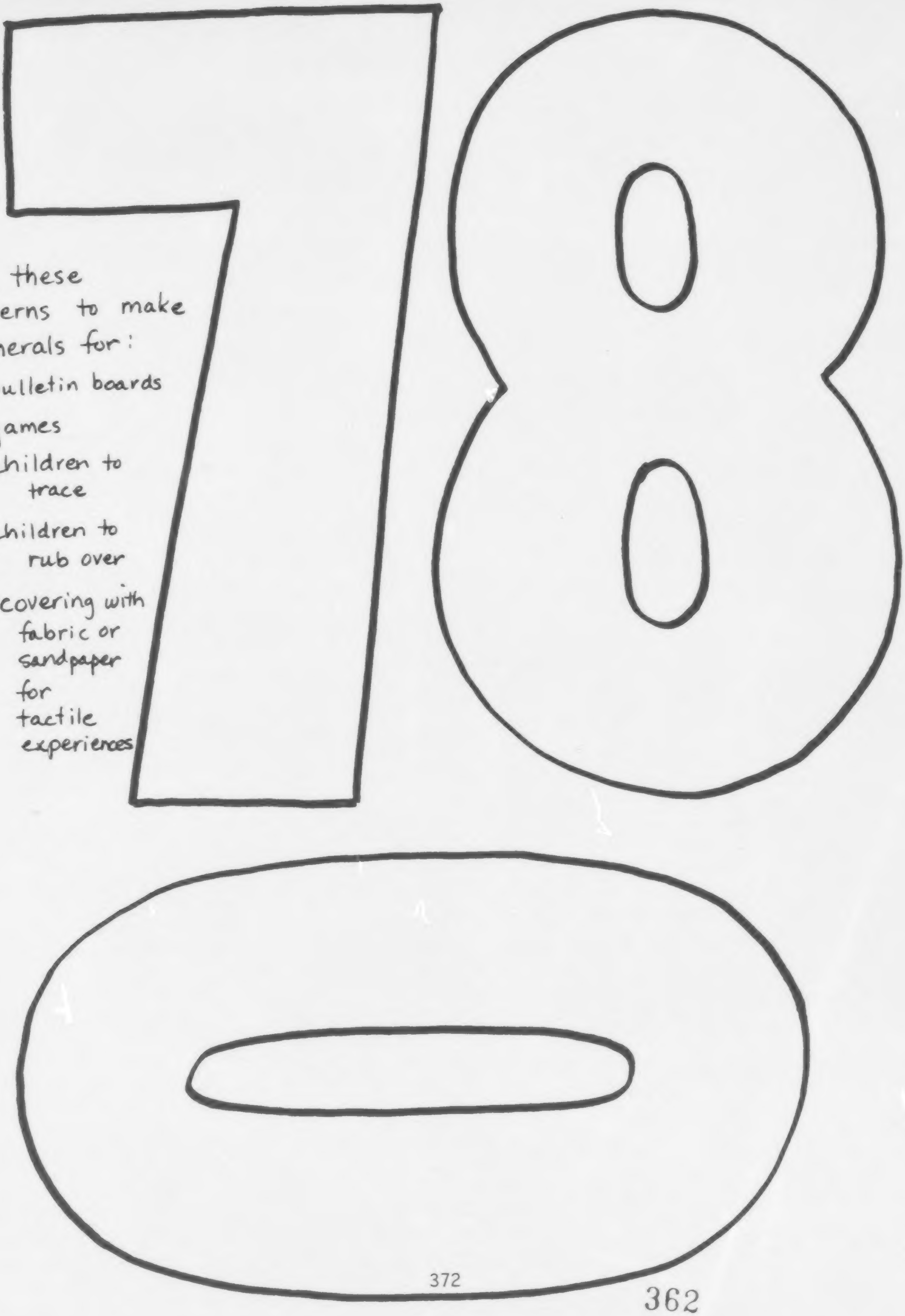




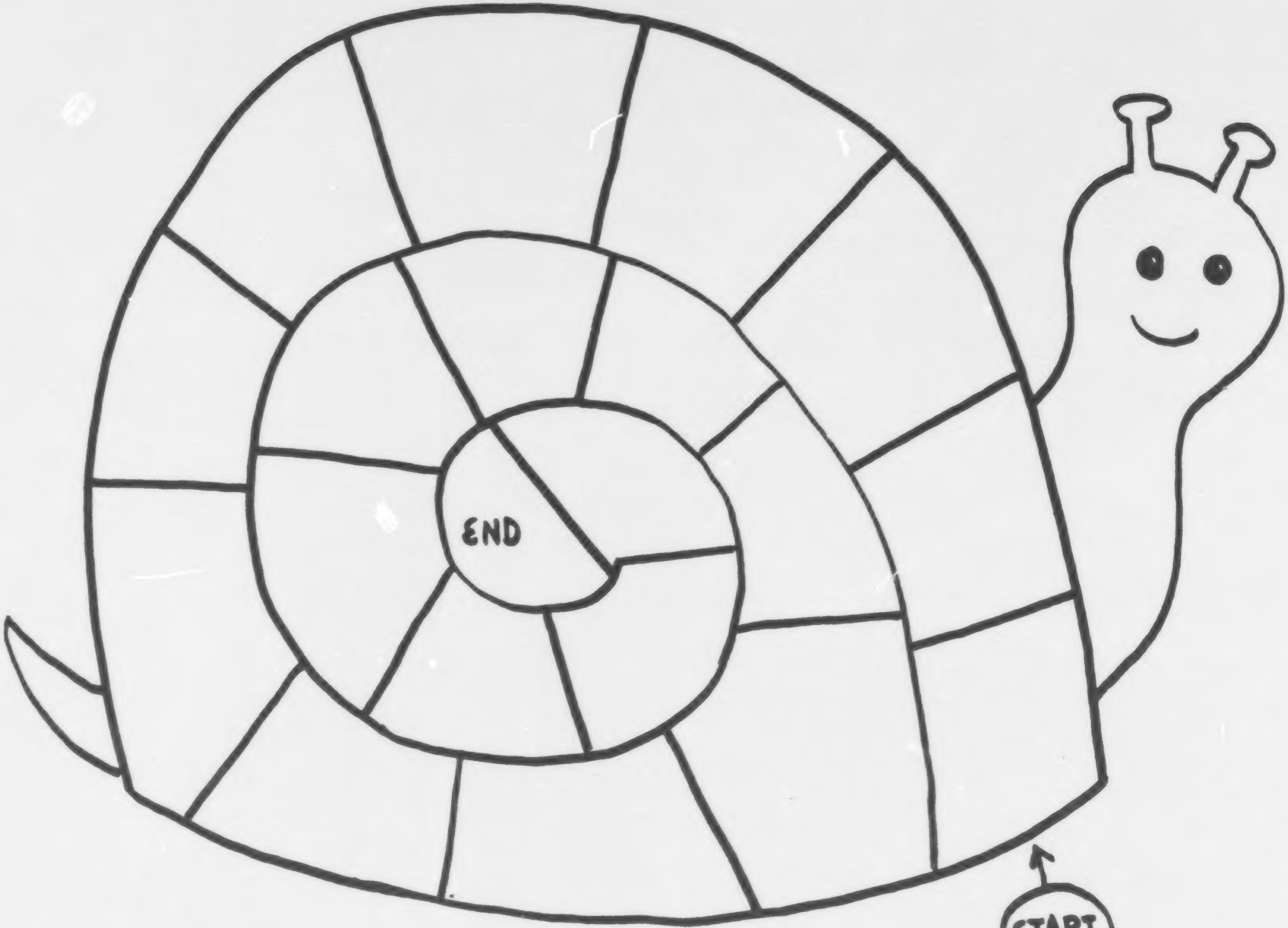


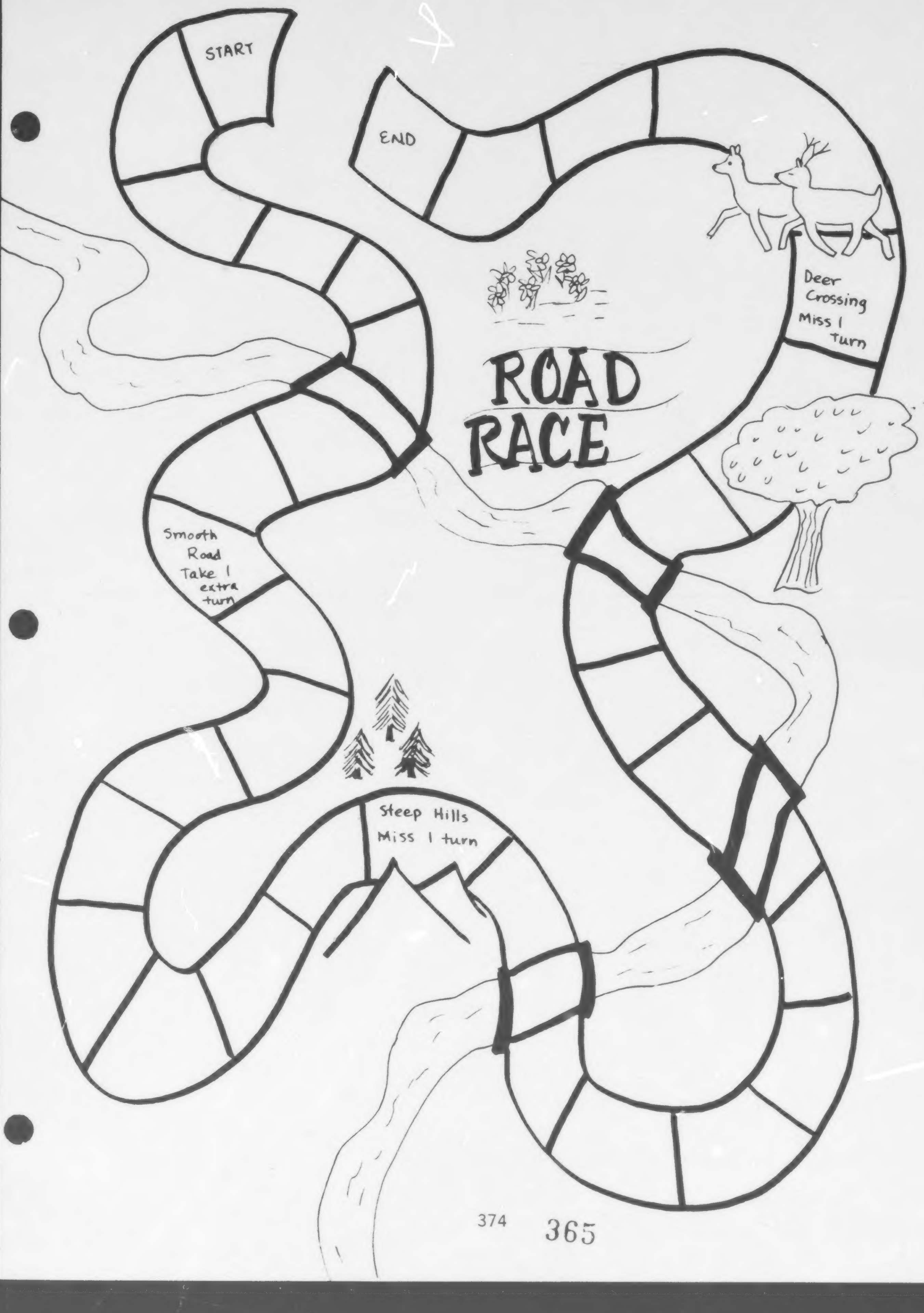
Use these patterns to make numerals for:

- bulletin boards
- games
- children to trace
- children to rub over
- covering with fabric or sandpaper for tactile experiences

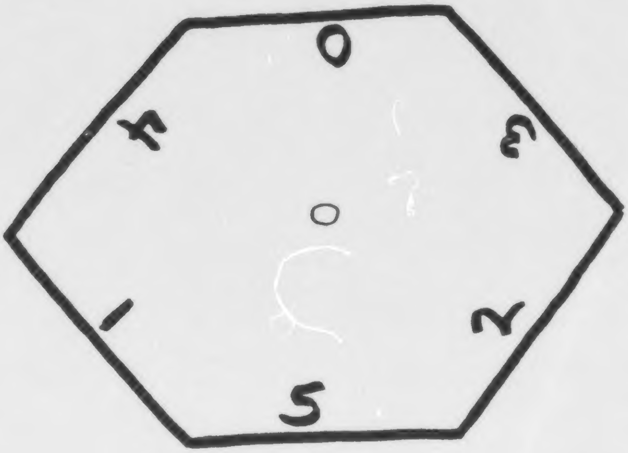


SNAIL'S PACE

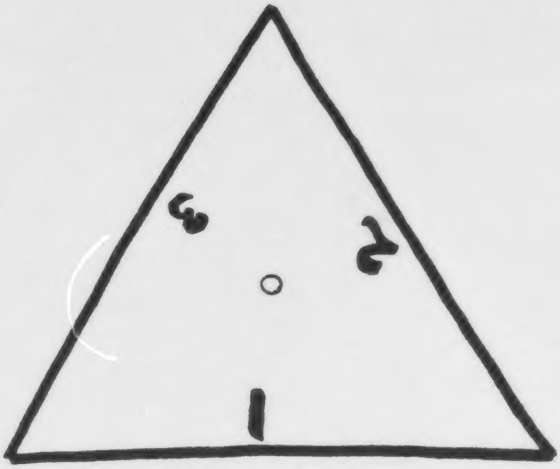



START
END
ROAD RACE
Deer Crossing Miss 1 turn
Smooth Road Take 1 extra turn
Steep Hills Miss 1 turn

NUMBER- NUMERAL BOARD GAME patterns



Golf Tee Spinner

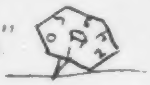


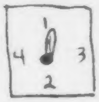
Golf Tee Spinner

Golf Tee Spinner

Duplicate and cut out a spinner shape from above. Insert a golf tee through the hole in the middle. The children take the number of moves shown on the side that hits the floor or table top

"2 moves"

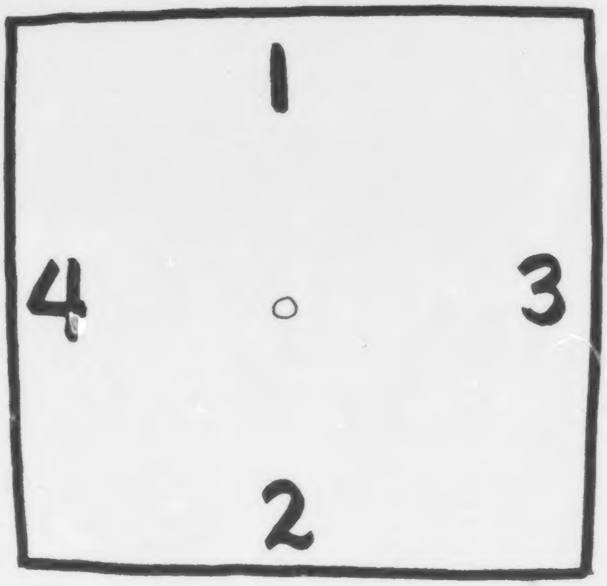




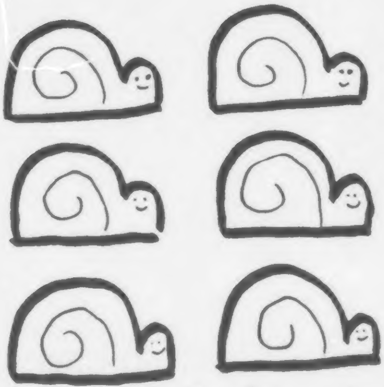
"1 move."

Paper Clip Spinner

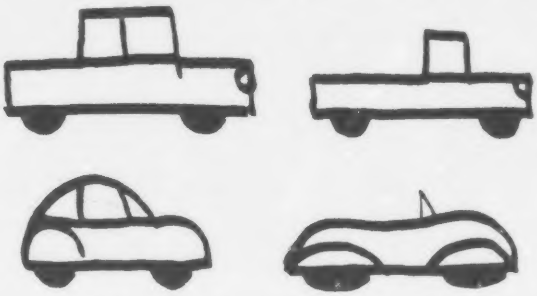
Attach a brad through the hole in the center. Put a paper clip on the brad. Leave it loose enough to spin freely.



Paper Clip Spinner



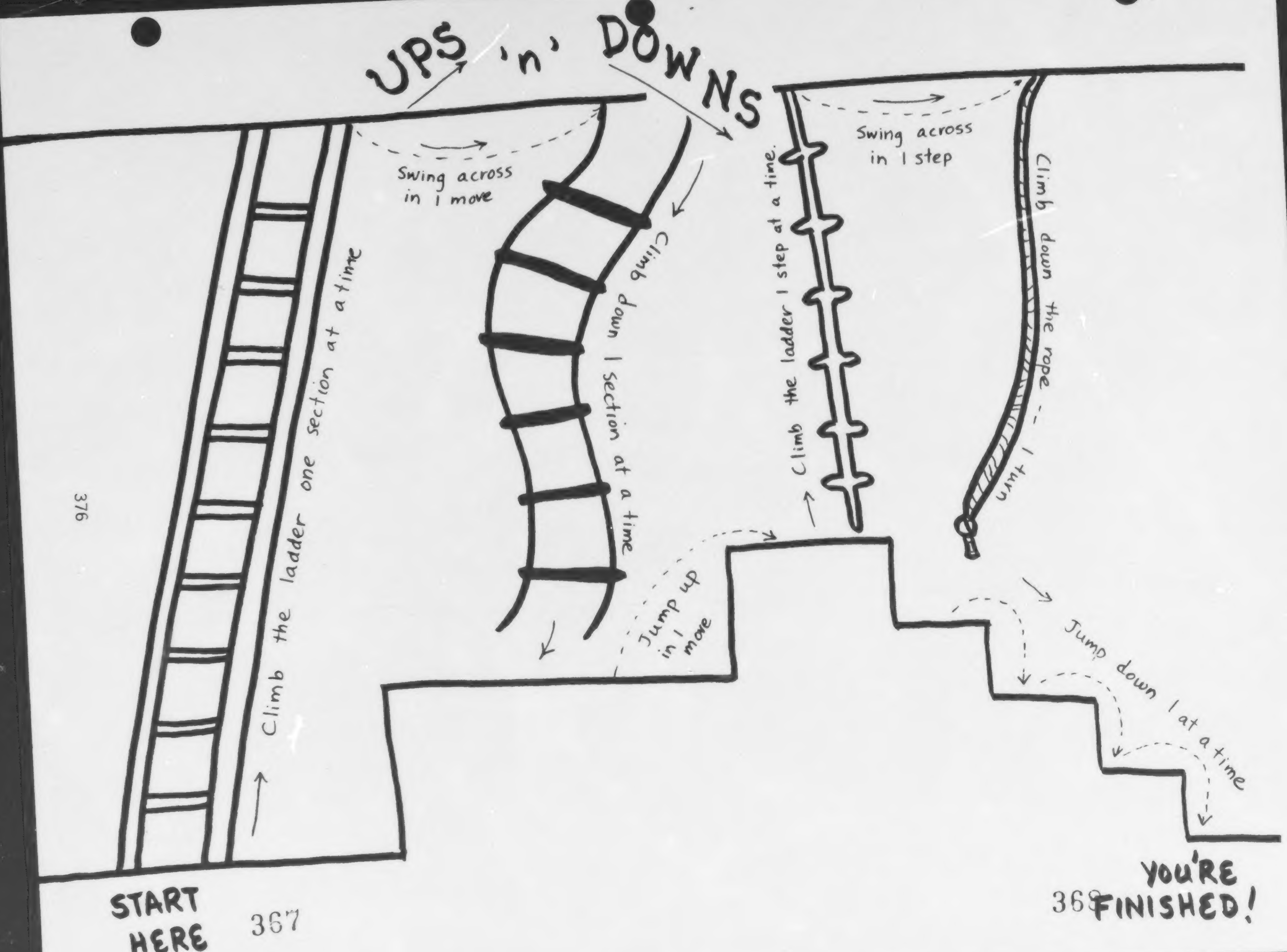
Markers for "Snail's Pace"



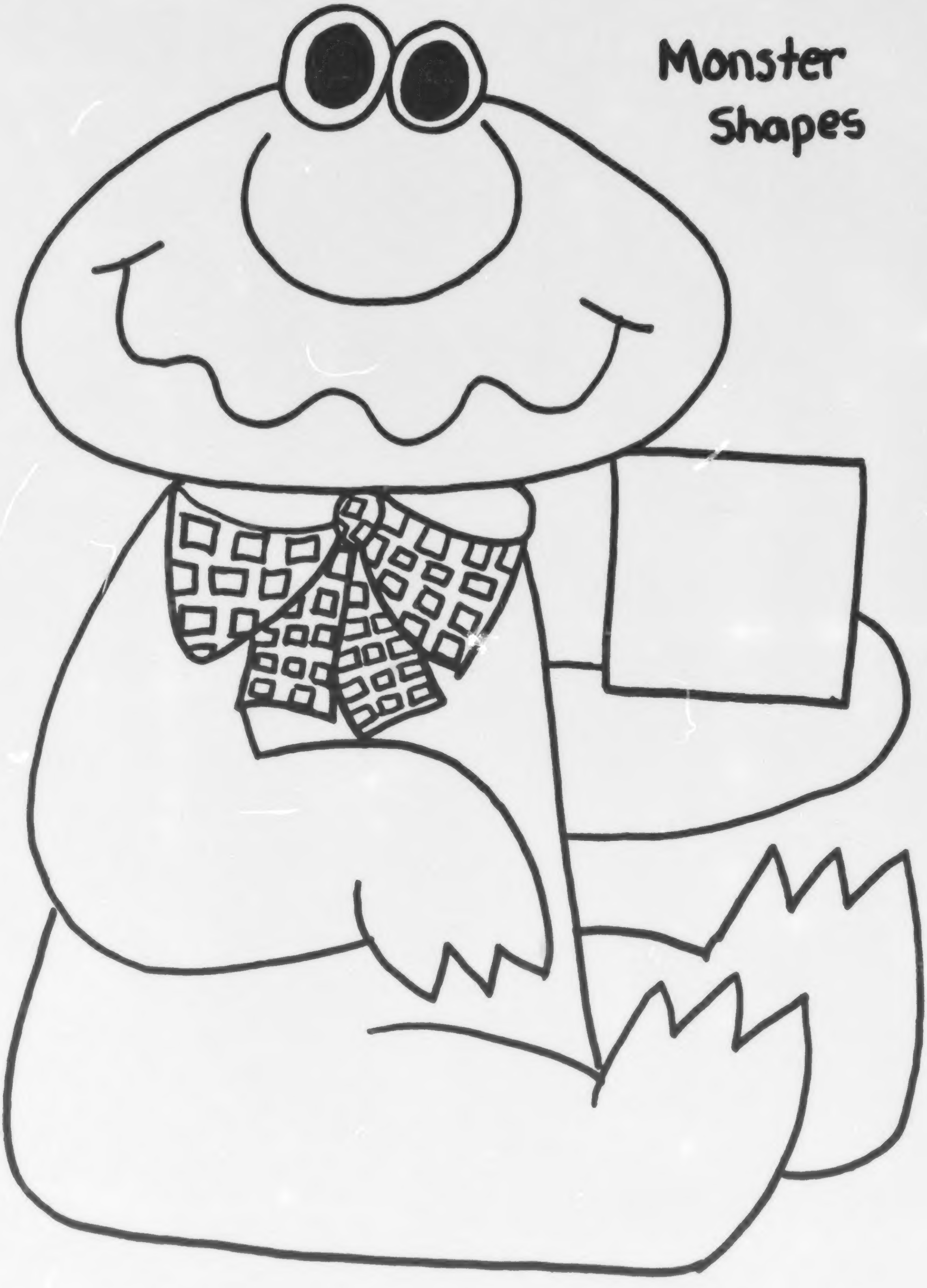
Markers for "Road Race"

Use pennies or tiny plastic animals for markers for "Ups 'n' Downs."

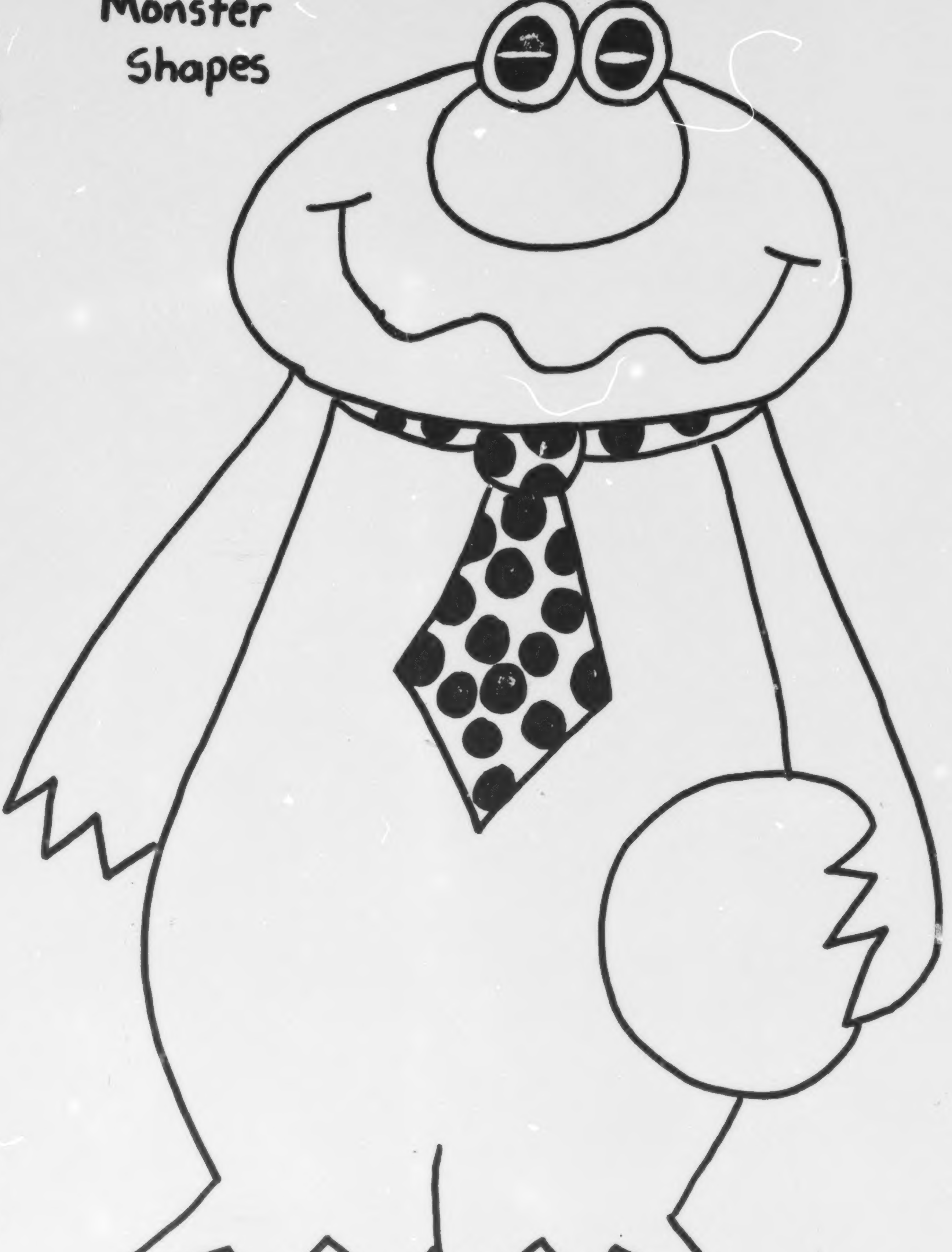
UPS 'n' DOWNS


Climb the ladder one section at a time
Swing across in 1 move
Climb down 1 section at a time
Jump up in 1 move
Climb the ladder 1 step at a time.
Swing across in 1 step
Climb down the rope - 1 turn
Jump down 1 at a time
START HERE
YOU'RE FINISHED!

Monster Shapes



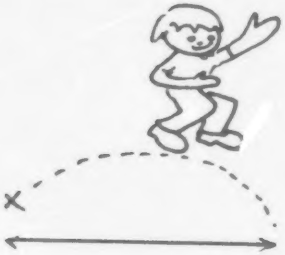
Monster Shapes

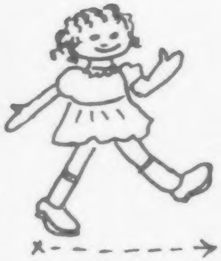


Outdoor Measures

my
broadjump

______ cm





my
giant step

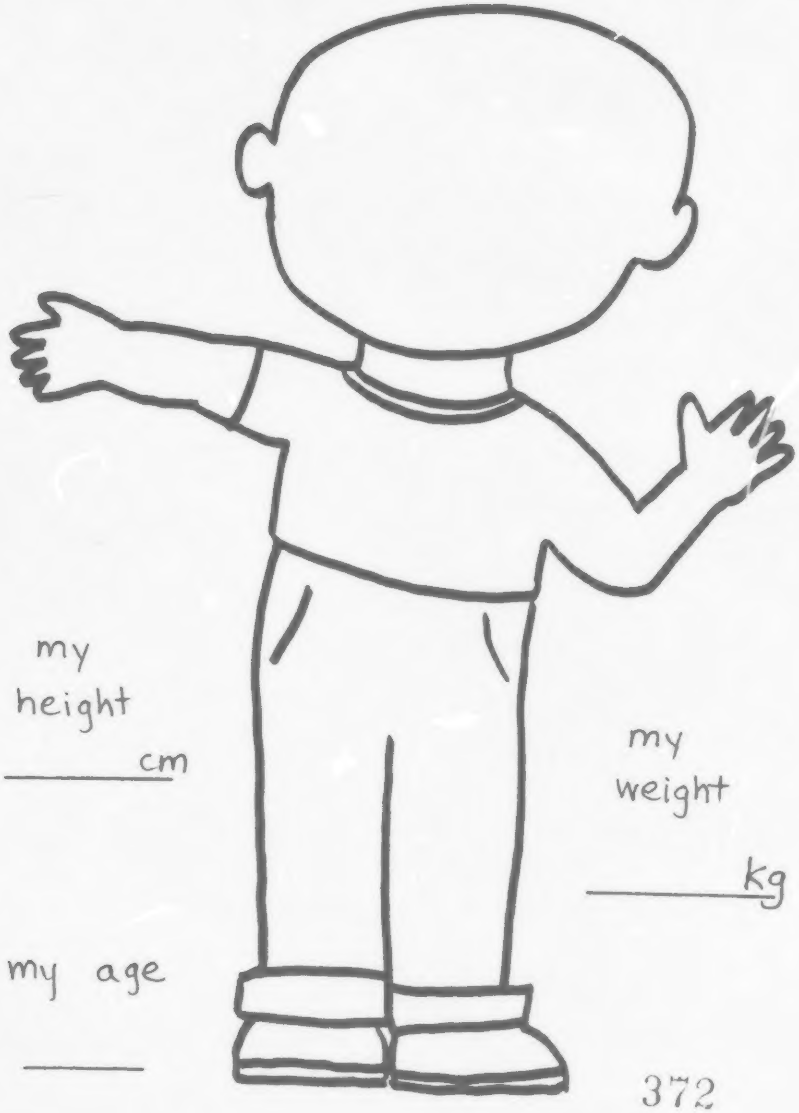
______ cm

the time it took
me for the
30 meter dash

______

A METRIC ME

name ______________________



my
height

______ cm

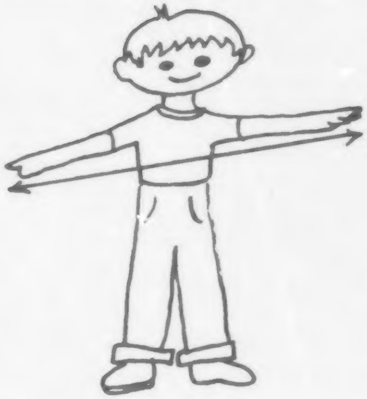
my
weight

______ kg

my age

______

Some Special Measures

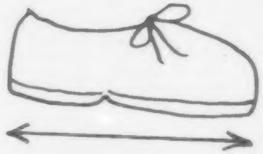


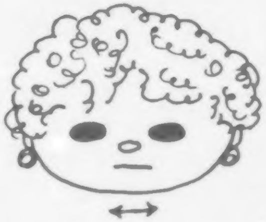
my armspan

________ cm

length of my foot

________ cm



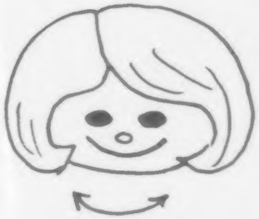


my mouth when I'm serious

________ cm

my mouth in a big grin

________ cm

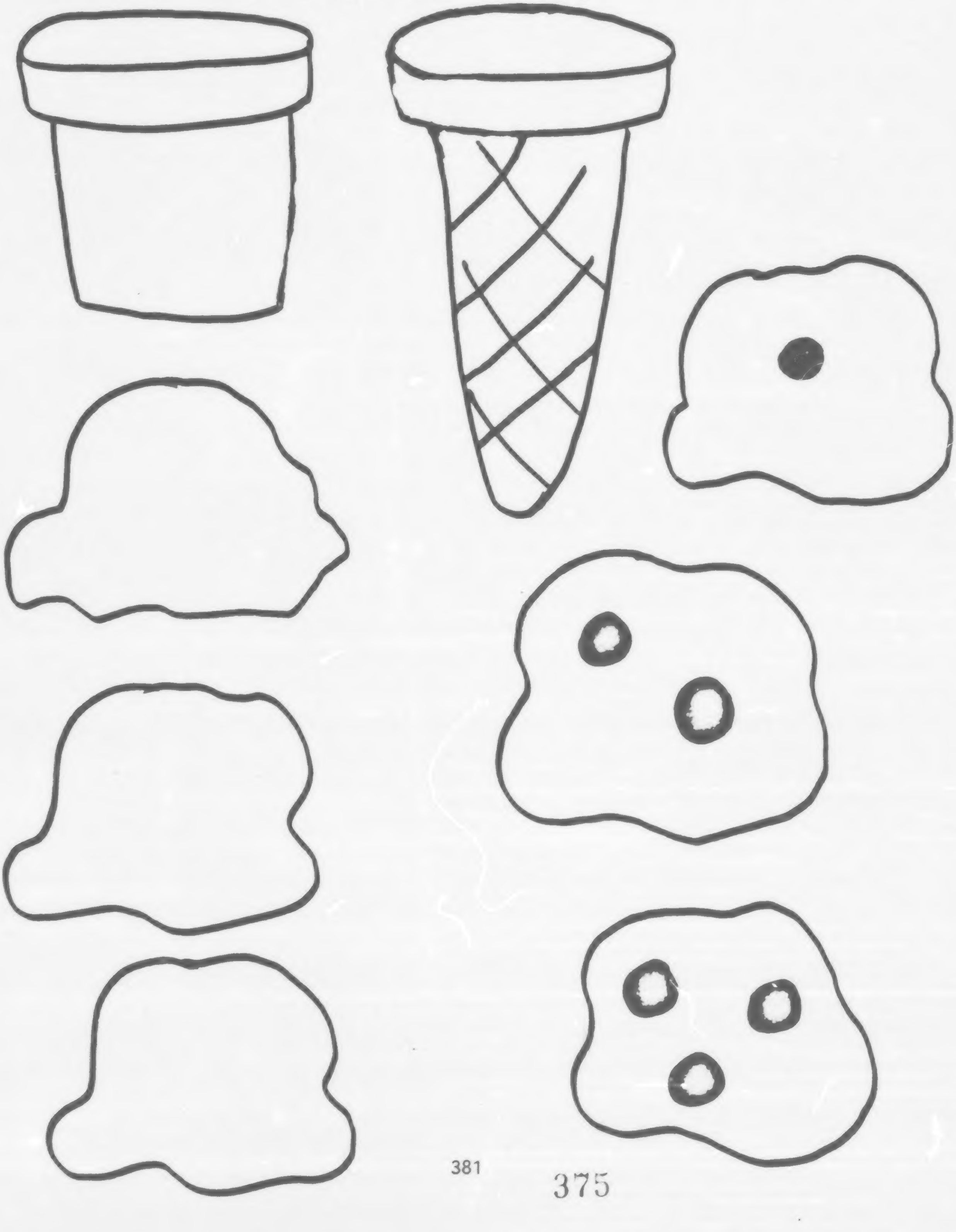


My Handprint

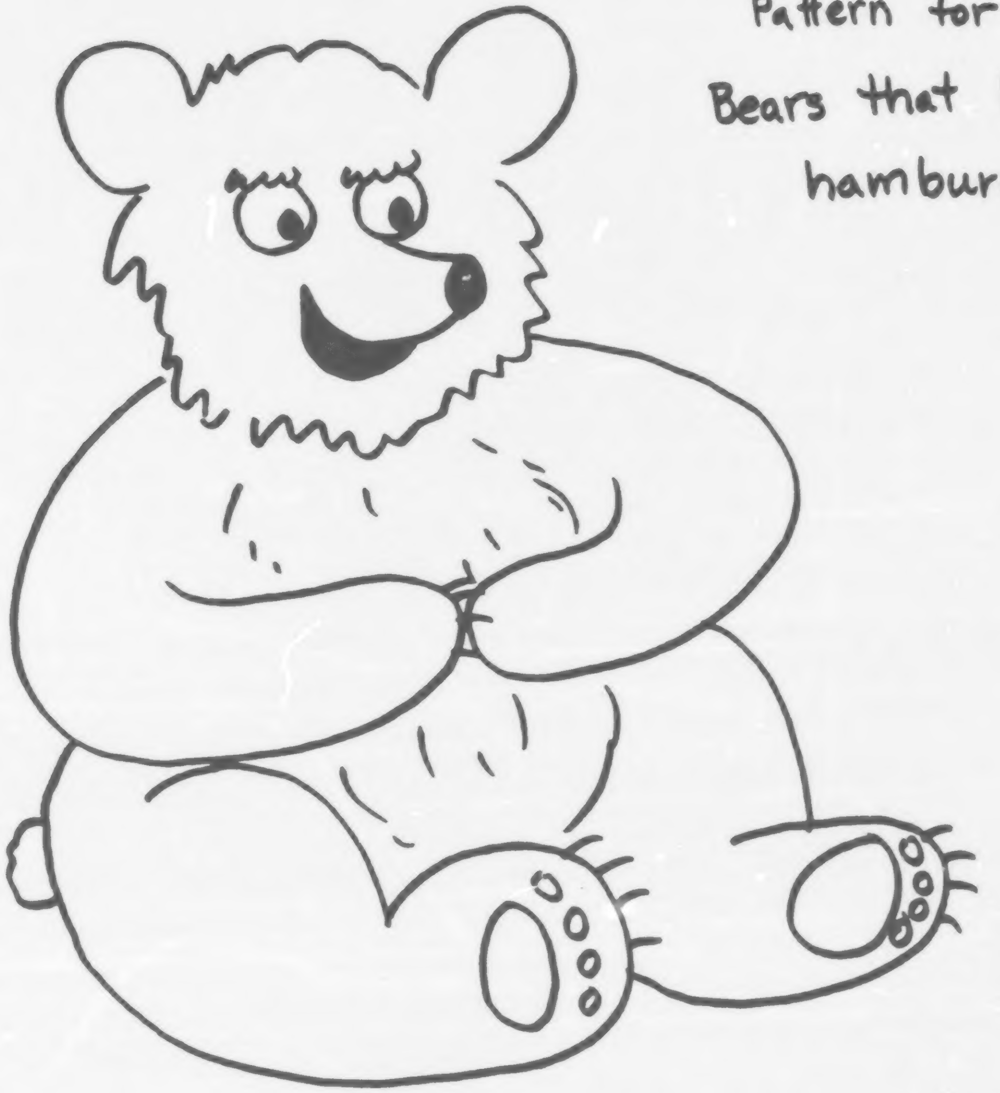
Trace your hand here. Measure its length and width.

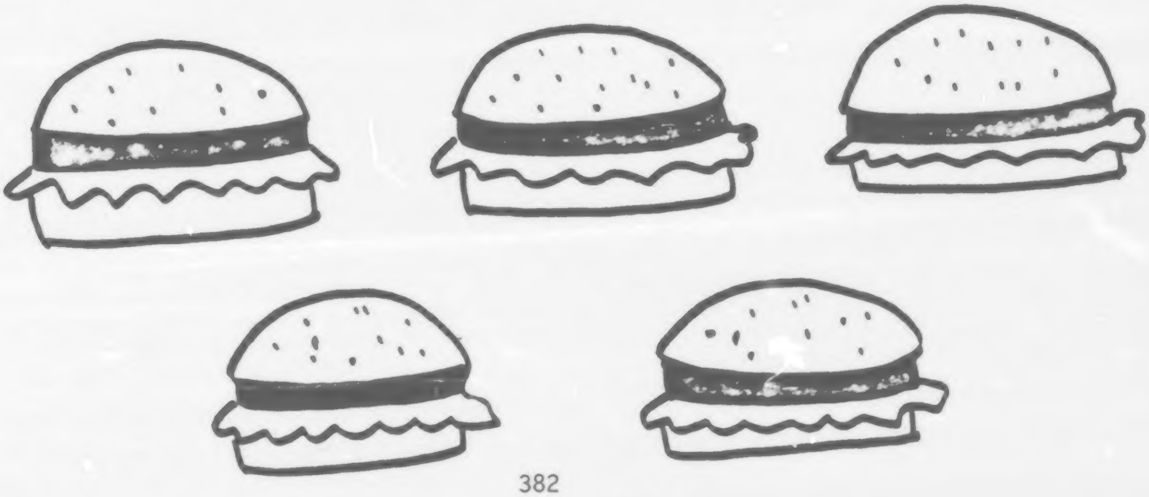
ICE CREAM CONES

Make scoops of different flavors or different numbers of "chips."



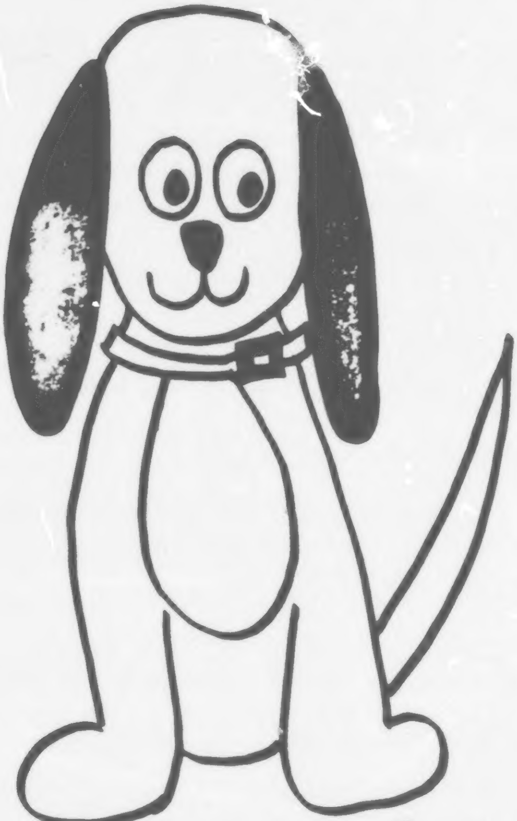
Pattern for
Bears that love
hamburgers!

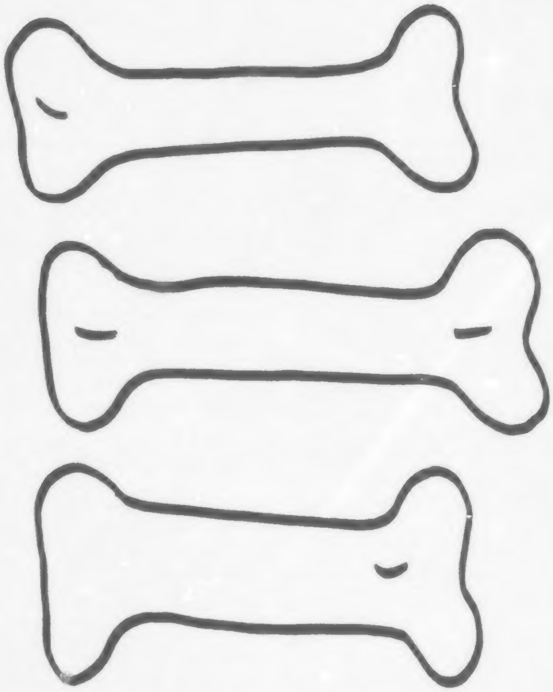




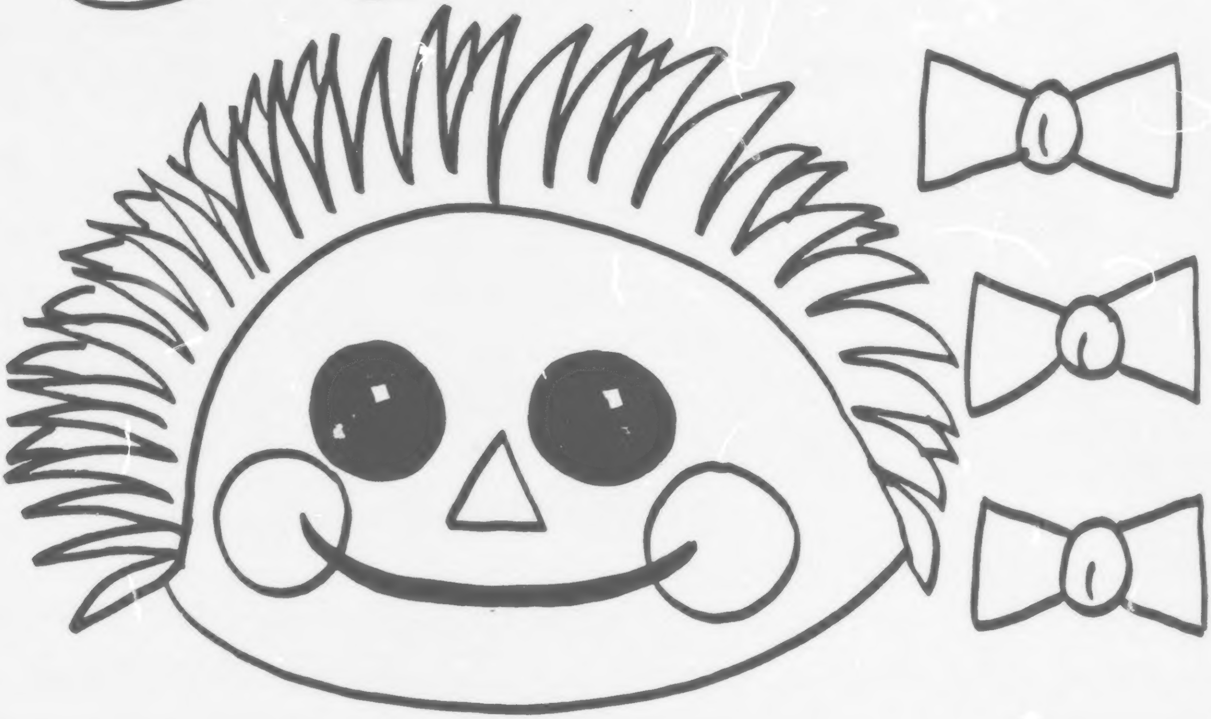
GRID PAPER for ARRAYS

Characters for SHARING GAMES





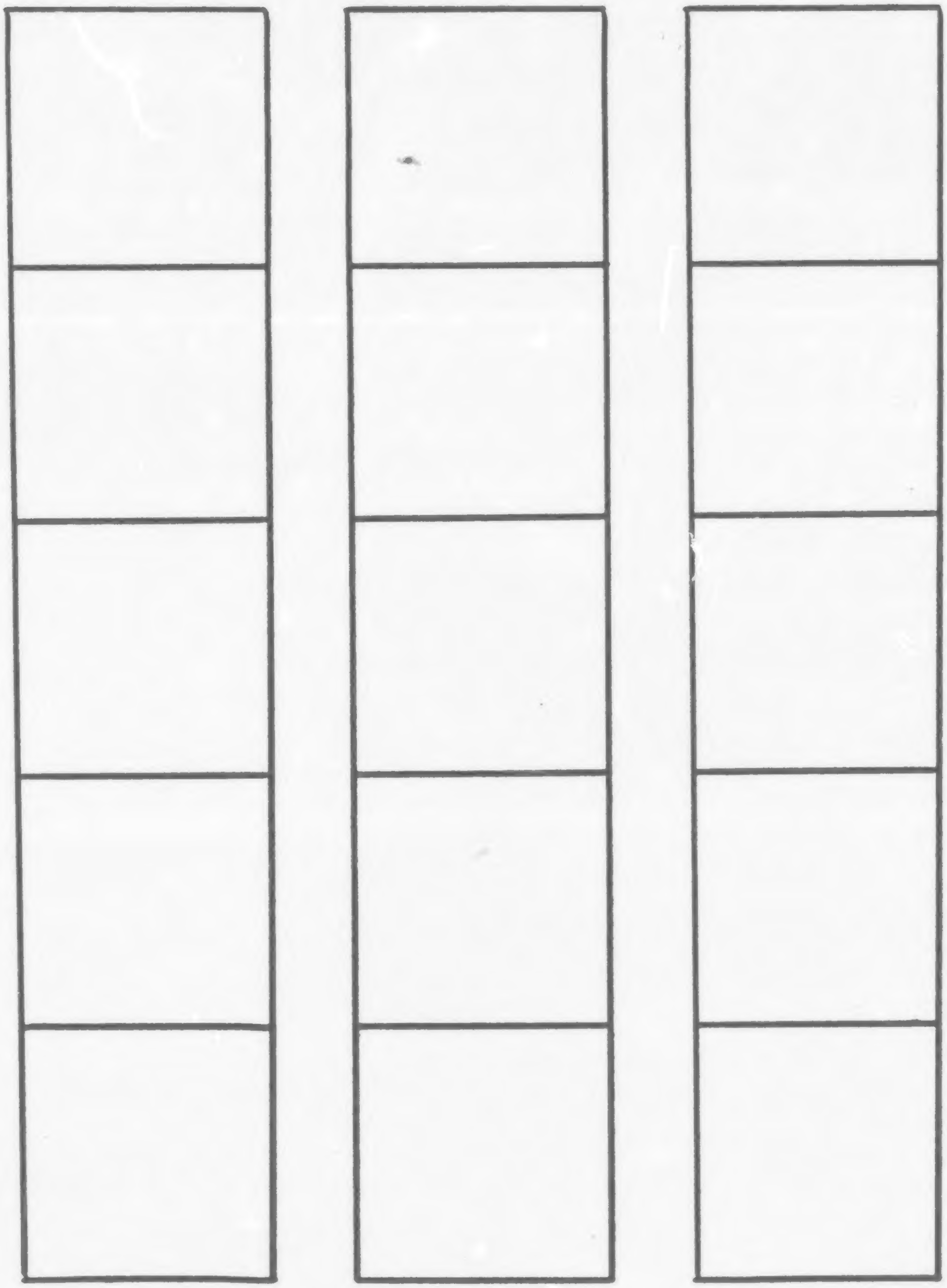
Duplicate 4-10 dogs and
30-50 bones



Duplicate 4-10 doll's heads and 30-50 bows.

Pattern for PUPIL POLL

Graph title ______________________________



______________ Category name

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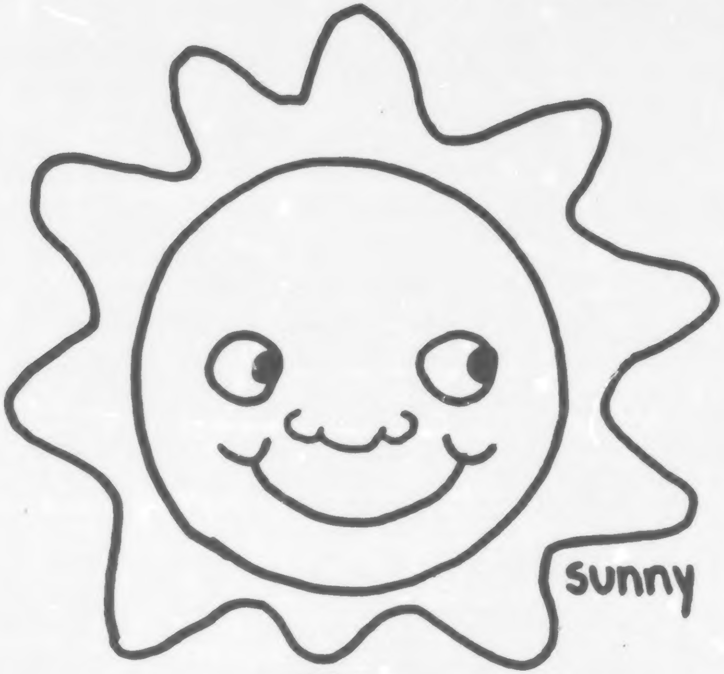
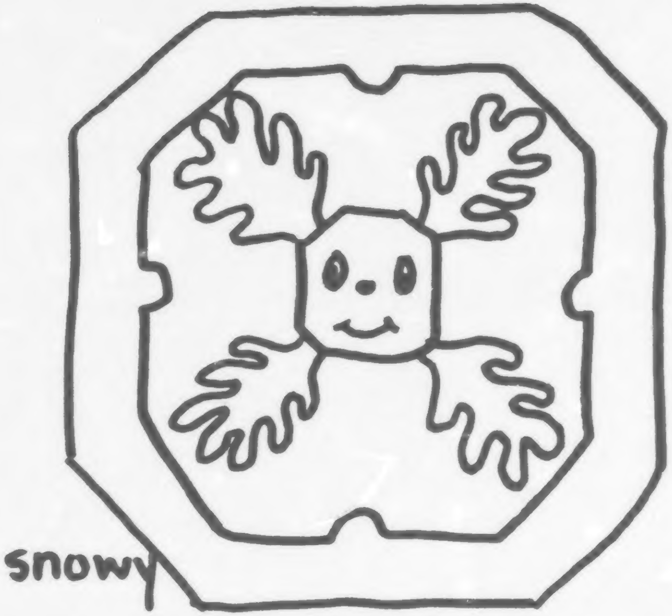
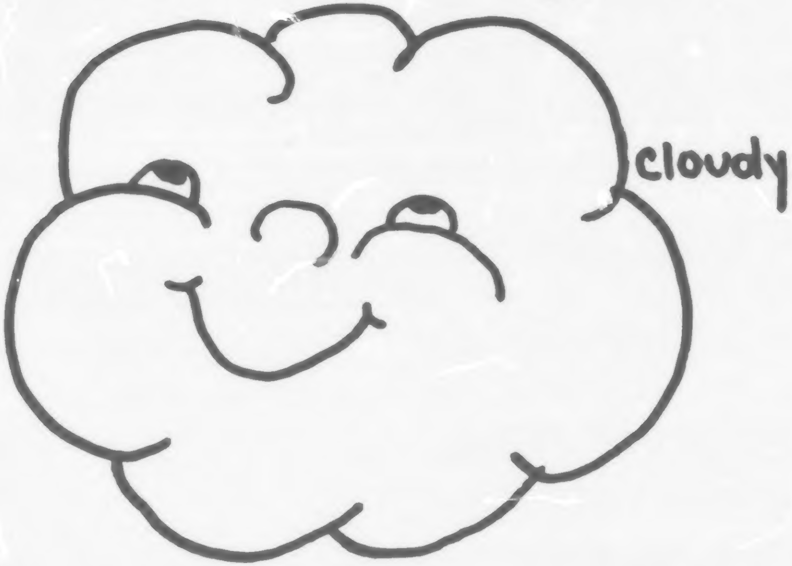
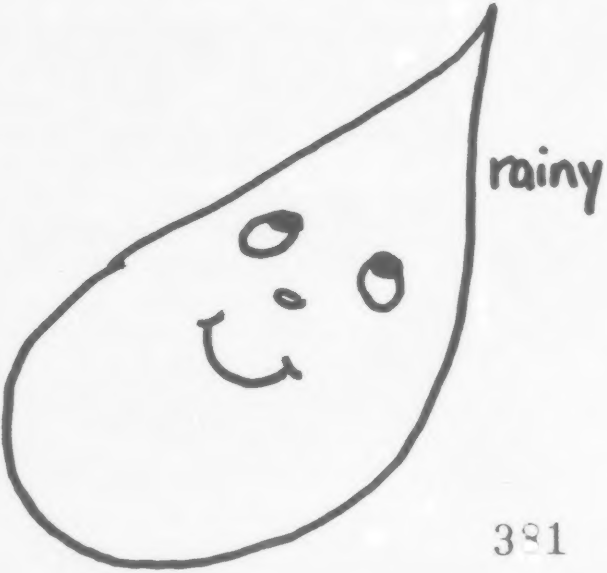
Weather Symbols

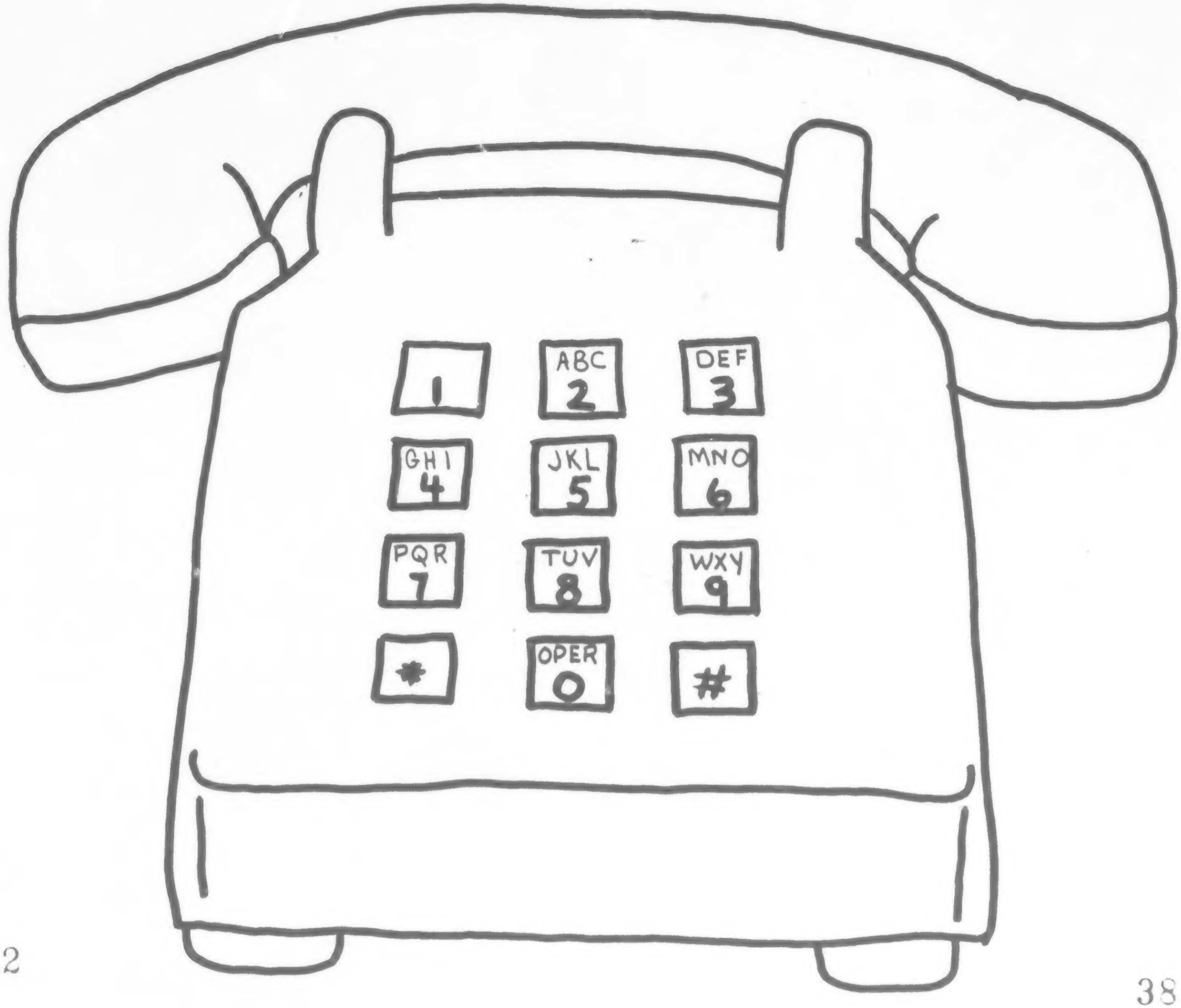








Number, Please


1
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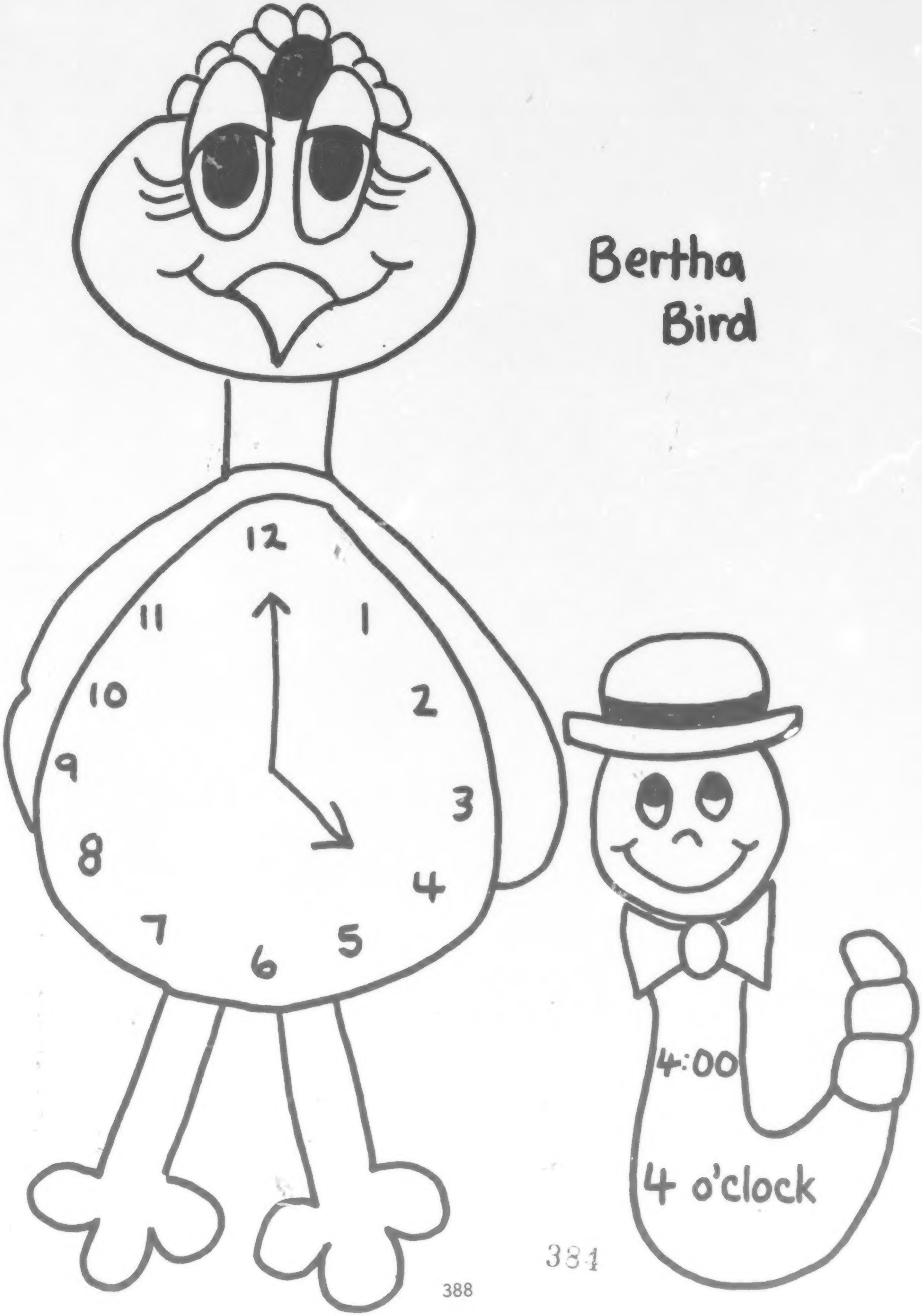
Bertha Bird
12
1
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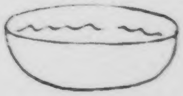
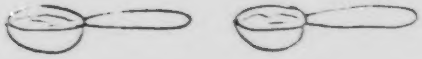
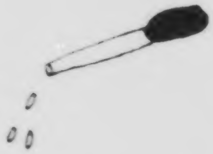
4 o'clock

SOAP BUBBLES

Mix together:

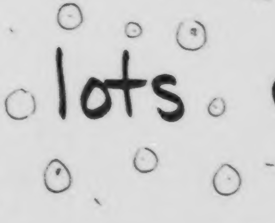
1  of water

2  of liquid detergent

3  of glycerin

Stir it 4 times.

Blow lots of bubbles!



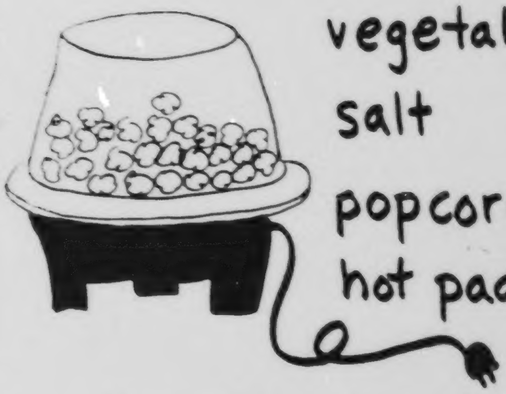
Duplicate the picture recipe. Let the children use it to make a simple soap bubble solution.

Popcorn

You will need:

- popcorn
- vegetable oil
- salt
- popcorn popper
- hot pads

Popcorn
Salt
Vegetable
OIL



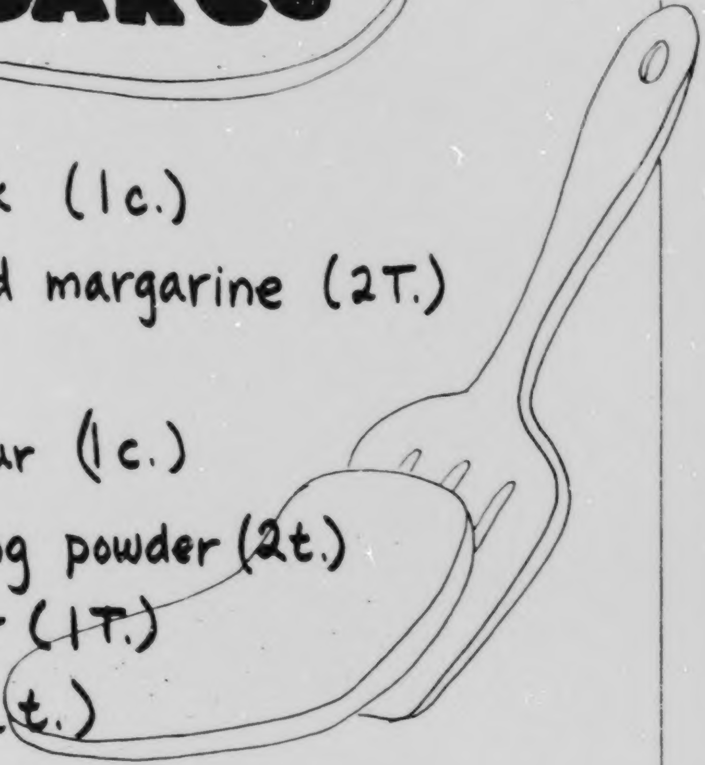
Pour in enough oil to cover bottom of popper (about 50 ml) Cover popper with lid until oil heats. Add 200 ml (about 3/4 c.) popcorn. Watch the corn pop. When it stops popping, carefully turn the popper upside down. Salt the popcorn lightly.

Peanut Butter Balls

2 egg yolks
5 ml vanilla
1 ml salt
250 ml crunchy peanut butter
125 ml powdered milk
250 ml powdered sugar

Mix egg yolk, vanilla and salt together in bowl. Beat well. Add peanut butter, sugar and milk. Mix throughly. Knead mixture with fingers until it is firm. Shape into 1" balls and roll in powdered sugar. Makes about 16 peanut butter balls.

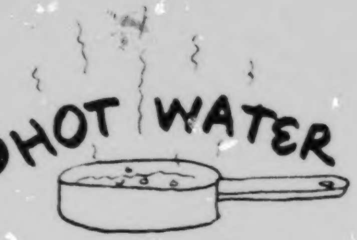
PANCAKES



① 250 ml milk (1c.)
② 30 ml melted margarine (2T.)
③ 1 egg
④ 250 ml flour (1c.)
⑤ 10 ml baking powder (2t.)
⑥ 30 ml sugar (1T.)
⑦ 3 ml salt ($\frac{1}{2}$ t.)

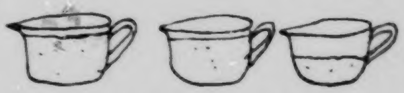
Pour 1, 2, and 3 into a bowl. Beat. Add 4, 5, 6, and 7. Stir all ingredients together. Carefully pour into a squeeze bottle. Lightly grease an electric skillet. Heat to medium. Form pancakes. Turn them over when bubbles form on the top. Eat plain or with cinnamon sugar.

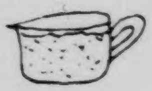
Duplicate and color in the recipe chart. Use for making pancakes

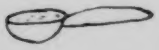


PLAY DOUGH

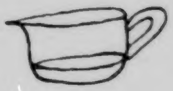
Measure and mix in a bowl:

600 ml (2½c.) flour 

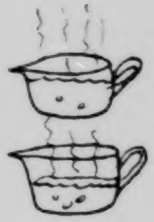
250 ml (1c.) salt 

15 ml (1T.) alum 

Add:

60 ml (¼c.) oil 

Stir in:

375 ml (1½c.) hot water 

Knead on table top until smooth. Add textured ingredients such as oatmeal, sand, or cornmeal, or add a few drops of flavored extract.

Compiled by:

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Department of Curriculum and Instruction
University of Mississippi

Judy G. Kirk
Director, Union County Child Development
New Albany, Mississippi

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Creative Art

INTRODUCTION

We know that as a child grows, we can expect him to sit, to stand, to walk, and then to run, in that order. In art we find the same kind of order .... or stages of development. It is important that we accept a child where he is. He needs many chances to experiment with art materials on his own level. True art allows the child to think and speak for himself. Patterns, stencils, and mimeographed coloring sheets say to the child that his own work is not good enough. They discourage independent thinking and make the child question his own ability. It is far better to give the children the time, space and materials... The encouragement and the freedom... to grow naturally in art.[1]

TEN GUIDES TO CHILDREN'S ART ACTIVITIES

1. Place emphasis on the process, not the product, when presenting or commenting on children's art experiences.

2. Encourage the unique creative expression of each child by avoiding models for children to copy or coloring-book type drawings, both of which interfere with creativity. Each child needs to be praised and encouraged to use his individual initiative. Their work should be displayed at their eye level.

3. Appreciate the various stages through which children progress in their ability to represent "reality." Young children draw things as they see them and not as adults see them. Their work will be simple with unessential things left out. Color, size and proportions will probably not be as an adult would think it should be. These elements of fantasy are what makes his/her work so charming.

4. Plan and prepare activities in detail to leave time to appreciate the individual responses of each child using a material.

5. Provide nonstructured materials to which the child can add his/her personal touch.

6. Avoid asking children "What are you making?" or guessing what they have made. They should be, however, encouraged to verbalize about their work as it helps them verbalize in other areas of expression.

7. Use physical, verbal, and affective guidance appropriate for the age and stage of the child.

8. Think of art activities as pre-writing and pre-reading experiences.

9. Teach intellectual concepts through art activities, such as color, sizes, and shapes, as well as using art to relate to other curriculum areas.

10. Interpret to parents the goals and procedures of creative art education for children.

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[1] Childhood Resources, 1150 Connecticut Avenue, N.W., Washington, D.C. 20036, 1969.

ART IN THE KINDERGARTEN

RATIONALE

1. Creative art is essential for any kindergarten program. Through art activities the child is able to develop physically, intellectually, socially, and emotionally as well as creatively.

2. A child's self concept, independence, individuality, thinking skills, concept development, motor skills, discrimination skills, perceptual skills, and communication skills are just a few specific areas that are developed as a child engages in creative art activities.

3. Dittoed art sheets, coloring books, copying exercises, and models, as well as activities which impose adult standards on young children, discourage and sometimes destroy the above types of development.

4. Knowing that the kindergarten-aged child could be in any stage from scribbling to drawing things that are easily recognized by adults will help the teacher see meaning in each child's art work and also avoid the mistake of pushing children into activities beyond the child's developmental stage.

PLANNING AN ART CENTER

Although art activities can be done with large and small groups, the recommendation is to include an art center which would be one of the choices available to children during a planned activity period as well as other times during the day.

The following tips are helpful in planning an art center:

1. Both easel painting and a table activity should be set up each day.

2. If there is running water in the classroom, locate the art center near the water. A bucket of water and some sponges can be used in classrooms where no water is available.

3. Low shelves should be equipped with art supplies such as crayons, paper, scissors, glue, scrap material, clay or play dough.

4. A string hung low or drying rack is helpful for drying paintings.

5. Smocks or old shirts should be available for messy activities.

6. The floor should be washable or covered with newspaper or large sheet of plastic such as an old shower curtain.

7. The center should be well organized so that the children can work and clean up as independently as possible.

ACTIVITIES

In addition to planned activities such as the ones presented in this section children should have access to materials and be encouraged to engage in independent art activities such as drawing with crayons, pencils, magic markers, chalk; easel painting; working with clay and/or play dough;

cutting; pasting; and tearing. A chart can be found at the end of this section indicating the skills developed with each of the following planned activities.

EVALUATION OF ACTIVITIES

Teacher evaluation of activities should be done through observation of the process the child demonstrates as he/she completes the activity. Judgements of the "prettiest" are not appropriate, rather how organized the thinking process was as demonstrated in completing the task is to be noted.

PAINTING

Title: Paint Blots

Materials: Liquid tempera, crayons, paper, scissors, glue

Procedure: Drop small amounts of various colors of paint onto paper. Fold paper in half and press with hands. Open and let dry. Use your imagination and make into a picture with crayons or cut and paste on another sheet before completing.

Title: Clorox Painting

Materials: Q-tips, dark colored construction paper, Clorox, small bottle caps.

Procedure: Q-tips are dipped in Clorox and used on dark colored construction paper or tissue paper. The Clorox can be poured into small bottle caps for safe usage. Activity may be conducted outside

Title: "Squeezy" Painting

Materials: Dry tempera, salt, empty glue, liquid starch, and/or detergent bottles, paper

Procedure: Mix equal amounts of dry tempera, salt, and liquid starch. Put in empty liquid detergent bottles. Let the children "squeeze" a painting.

Title: Marble Painting

Materials: Paper, tray or dress box lid, tempera and marbles

Procedure: Place a piece of paper in several trays or boxes. Have bowls of paint out for the children to drop marbles into. Spoon the marbles onto paper and roll them around by tilting tray. The marbles will paint a design.

Title: Water Painting

Materials: Blackboard, water, paint brush

Procedure: Paint a picture with water on the blackboard. This activity can also be done with brushes and buckets of water outdoors on the side of a building, sidewalk, playground equipment, etc.

Title: Soapsud Painting

Materials: Ivory Snow, water, brushes, paper

Procedure: Mix Ivory Snow and water to a thick cream consistency. Beat mixture until it hold peaks. Use as fingerpaint or with brushes as paint. Dry tempera or food colors can be added if desired.

Title: Roll on Deodorant Painting

Materials: Roll on deodorant bottles, tempera, and paper

Procedure: Pop off tops to roll on deodorant bottles. Pour in diluted paint, replace tops, and roll on paper.

Title: Printing

Materials: Tempera paint, pie tins, absorbent paper and objects such as: oranges, apples, potato masher, hair curlers, cabbages, potatoes, okra, bell pepper, kitchen utensils, nuts, bolts, cookie cutter

Procedure: Provide several pie tins with pads of different colored easel paints. Make a pad by folding several paper towels and wetting them with water. Pour paint on top of pads. Let children "print" by dripping a variety of objects into the paint and making impressions on absorbent paper.

Title: Newspaper Painting

Materials: Paints, brushes, newspapers

Procedure: Let children paint freely on pages of newspaper. The newspaper background gives the painting a different effect. The newspaper can be used as easel paper also.

Title: Shaving Cream Fingerpaint

Materials: Shaving cream, dry tempera (optional)

Procedure: Use shaving cream on desk or table top for fingerpaintings. Dry tempera can be added for color if desired. This is a good pre-writing activity.

Title: String Surprise

Materials: String, tempera, paper

Procedure: Dip string in paint. Let string fall on paper holding onto one end. Fold paper (in half) over string and put a heavy catalog on top. Pull string out. This can be repeated using other colors. The design can be made into a picture using crayons or markers if desired.

Title: Dip n' Dye

Materials: Small bowls or oleo containers, water, food colors (Party cake coloring is excellent.), absorbent paper (towels, newspaper, etc.)

Procedure: Prepare bowls of food-colored water. Fold the absorbent paper in various ways. Dip corners of paper into the dye-water, unfold and let dry. These can be made into gift wrap paper, paper butterflies, background for drawings, etc.

CONSTRUCTION MODELING

Title: Shrink Art (Adult Supervision Required)

Materials: Clear plastic lids or cups, broiler oven, permanent markers

Procedure: Draw-on lids or styrofoam with markers. Put in 300° oven for 1-3 minutes. Watch it shrink! Remove it and it hardens.

Title: Stained Glass (This needs to be carefully adult-supervised.)

Materials: Crayon flakes or bits, wax paper, hand iron, newspaper

Procedure: Put crayon shavings or bits on wax paper. Cover with another sheet of wax paper of the same size. Put the wax paper "sandwich" between two sheets on newspaper or on a pad of newspaper. Iron over the top piece; the crayons will melt and make a stained glass effect.

Title: Egg Carton Sculpture

Materials: Egg cartons, scissors, pipe cleaners

Procedure: Let the children use their imagination as they cut and shape the egg cartons and pipe cleaners.

Title: Box Sculpture

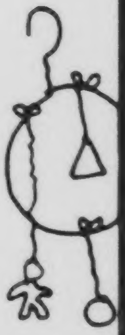
Materials: Variety of boxes, glue, rubber cement or masking tape, mixed tempera paint, brushes, scissors

Procedure: Children cut and glue boxes together to build structure(s). When dry it may be painted. This can be done as a group project or by individuals.

Title: Coat Hanger Mobiles

Materials: Coat hangers, yarn or string, paper. (Materials will vary according to type mobile being made.)

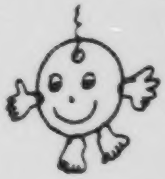
Procedure: Shape hanger into circle leaving hanger curve intact or use as it is. Using yarn of different lengths, attach whatever you want to make the mobile of: animals, tissue paper raindrops, members of the family the children have drawn and cut out, etc.



Title: Me Mobile

Materials: Paper plate, string or yarn, construction paper, glue, crayons

Procedure: Children decorate paper plate as their head. Trace around both hands and feet and cut out. Staple, glue, or tape hands and feet to plate to resemble a person.



Title: Stuffed Paper Animals/People

Materials: Large sheets of paper such as butcher paper, crayons, markers or paint, stapler or hole punch and yarn

Procedure: Child paints or draws an animal or person on a large folded sheet of paper. He/she then cuts out the figure making sure that both sheets of paper are being cut. Staple about 3/4 of the figure. Stuff it and then complete the stapling. The child can punch holes around the edges and "stitch" the figure together with yarn instead of stapling.

RECIPES FOR MODELING

Be sure to use recipe charts and let child help make these modeling mixtures. Emphasize math, science, and language skills. (Ex.: building a sight vocabulary).

Title: Cooked Play Dough

Ingredients: 1 cup flour, ½ cup salt, 2 teaspoons cream of tarter, 1 cup water, 1 tablespoon oil, food coloring and "mixing utensils"

Procedure: Combine ingredients. Cook about three minutes or until mixture pulls away from sides of pan. Knead. Store in airtight container. Food coloring can be added in the liquid or solid stage if desired. Mold desired objects (Store in an airtight container for reuse.)

Title: Uncooked Play Dough

Ingredients: 2¼ cups flour, 1 cup salt, 1 tablespoon alum, 4 tablespoons vegetable oil, ½ cup boiling water, food coloring

Procedure: Mix dry ingredients. Add oil. Stir in water. Knead until smooth. Add food coloring and knead again. Mold. (Store in an airtight container for reuse.)

Title: Candy Clay (edible)

Ingredients: 1/3 cup oleo, 1/3 cup light corn syrup, ½ teaspoon salt, 1 teaspoon vanilla, food coloring

Procedure: Blend all ingredients and then mix in 1 pound of confectioners sugar. Knead until smooth. Make objects on top of cupcakes or graham crackers. Eat.

Title: Sawdust Clay

Ingredients: 4 cups fine sawdust, ¼ cup plaster of paris water, 1½ cups wheat paste

Procedure: Mix dry ingredients. Add water until mixture is the consistency of clay. Children can form objects and figures that when dry resemble carved wood.

Title: Bakers Clay

Ingredients: 4 cups unsifted flour, 1 cup salt, 1½ cups water

Procedure: Mix thoroughly with fingers (should not be too stiff). Knead 4 to 5 minutes. After objects are made, bake at least 1 hour in 350° oven. These can be painted after baked.

CUTTING, TEARING, GLUING

Title: Touch-It Pictures

Materials: Scissors, glue, paper, and various materials (cloth, sand paper, etc.)

Procedure: The goal is for the child to think primarily of his world in terms of its physical "feel" or surface quality. Let him/her choose various materials and glue them on a large piece of paper in a design or picture. Encourage verbalizations about the different textures.

Title: Tissue Design

Materials: Waxed paper, colored tissue paper, glue, brushes

Procedure: Let the child make a design by overlapping tissue paper that he/she has torn or cut. He/she then paints with diluted Elmers glue. The design can be peeled off after it dries or left on the waxed paper.

Title: Torn Paper Picture

Materials: Construction paper or tissue paper, glue, white paper for background

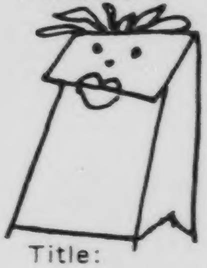
Procedure: Draw simple designs on the cardboard. Cut or tear paper into small pieces. When enough has been torn for the design spread paste over drawing and cover it with the paper.

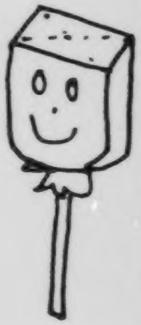
Title: Paper Bag Puppets

Materials: Small paper bags, crayons, paint or markers, construction paper, glue, scissors

Procedure: The child decorates the bag, stuffs it, inserts a stick into the bag, and ties the bottom of the bag to secure the stick.

The child decorates the bag so that the top lip on the face falls above the fold and the lower lip falls on the bag below the fold. (See illustration.) The child's hand can then be inserted in the bag to make the puppet "talk"





Title: Torn Paper Monsters

Materials: 9 x 12 paper, glue, crayons, marker or paint, newspaper

Procedure: Give each child a 9 x 12 sheet of newspaper. Have him/her tear a shape out of the paper and glue it onto a plain sheet of 9 x 12 paper. Using paint, crayons or markers, make the shape into a monster.

Title: Nature Collage

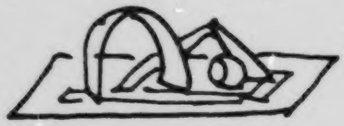
Materials: Glue, heavy paper, leaves, twigs, feathers, acorns, seeds, cotton, pebbles, etc.

Procedure: Let the children be creative by making textured pictures with the nature items they have collected.

Title: 3-Dimension Strip Collage

Materials: Large sheet of construction paper, strips of construction paper (many widths and colors), scissors, glue

Procedure: Paste some strips flat on the large sheet of construction paper. Curl, roll, fold other strips of construction paper and glue these over the flat design.



Title: Collage

Materials: Collection of different items, glue, construction paper or cardboard.

Procedure: Arrange items on paper. Glue and let dry.

SEASONAL IDEAS

Title: Halloween Jack-O-Lantern

Mateirals: Butcher or fingerpaint paper, orange fingerpaint, glue, scissors, construction paper scraps.

Procedure: Have children fingerpaint with orange, covering the entire surface of the paper. After it dries, the child freehand cuts a pumpkin and adds construction paper features.

Title: Fall Leaf Rubbings

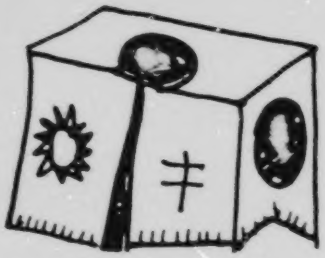
Materials: Assortment of fall leaves, crayons, thin paper.

Procedure: Have the child place paper over a leaf or collection of leaves. Using the flat side of a crayon, rub over the paper until the leaf textures are visible.

Title: Thanksgiving Indian Costumes

Materials: Large grocery sacks, crayons, markers, or paint, construction paper, scissors, glue.

Procedure: Headbands can be made from long strips of paper decorated by the child. Have the children cut construction paper "feathers" to glue on the headbands. An Indian vest can



be made by the teacher cutting holes for head and arms out of a large grocery bag, splitting the bag up the center front and fringing the bottom. The children then decorate these.

Title: Christmas Stained Glass Ornaments

Materials: Plastic lids from coffee cans, etc.; colored tissue paper, white glue.

Procedure: Children pour a diluted solution of glue into a lid until the bottom is barely covered. Each child tears small bits of tissue paper and overlaps them in the lid until the entire bottom surface is covered. When completely dry, "pop" the paper circles out of the lids, punch a hold in the top and hang on a tree or use as a mobile.

Title: Valentine People/Animals

Materials: Constuction paper, scissors, manila paper, glue

Procedure: Have precut hearts of different sizes or teach the children how to fold and cut their own hearts. Each child will design his/her own people or animals.

Title: Spring--Egg Carton Tulips

Materials: Egg carton cups, pipe cleaners, tissue paper or paint

Procedure: Take apart an egg carton and use one cup for each flower. Poke a hole in the bottom in which to stick a pipe cleaner. Children may decorate with tissue paper or paint.

Title: Cylinder Rabbits

Materials: Glue, scissors, crayons, construction paper, cotton, paper (white) cylinders (bathroom, paper towel tubes cut, etc.)

Procedure: Have children make rabbits out of the cylinders by adding cotton and features, etc. Talk about rabbit eyes, whiskers, tails, etc., before beginning.

Title: Candle Holders

Materials: Colored tissue paper, white glue, baby food jars, short candles

Procedure: Let each child tear tissue paper into small pieces and cover the outside of a baby food jar by overlapping the pieces as they are glued on. (Brushes work well with the glue for this project.) When the candle holders are completed, a small candle can be placed inside. These make good parents' gifts.

FABRIC AND FIBER

Title: Sewing on Burlap

Materials: Small squares of burlap, plastic darning needles or dull pointed crewel needles

Procedure: Provide each child with the materials and let each make his or her own design. Some may need help with the threading and knotting of the yarn, and the mechanics of sewing. (Children can very easily learn to do a running stitch, a satin stitch and a french knot.)

Title: Yarn Weaving

Materials: Yarn, melted wax, plastic berry basket or discarded fruit bags.

Procedure: Dip the end of the yarn in the melted wax or wrap the end with masking tape to form a point and let the child weave in and out of the berry basket or the fruit bag. Also, holes could be punched in styrofoam meat trays for the same activity, or let children use crewel needles and yarn and make their own holes.

Title: Fabric Collage

Materials: Scraps of material, glue, paper or cardboard

Procedure: Provide the materials and let each child create a picture.

Title: Fabric Designing

Materials: Permanent marking pens, muslin or cotton (Old sheets are good.) newspapers

Procedure: Cover floor or table with newspapers because permanent pens can be messy. Mark off the fabric in squares lightly with a pencil or just draw on it. Some things to make from your fabric are tablecloths, place mats, pillow covers, wall hangings, curtains or quilts.

DRAWING

Title: Complete A Picture

Materials: Paper, crayons or markers

Procedure: Give the child a piece of paper on which you have pasted or drawn a shape(s) or a part of a picture (cut from a magazine). Let the child use this as a start for his picture and complete it.

Title: Add A Person Picture

Materials: Magazines, crayons or markers, paper, glue

Procedure: Cut a picture of a piece of clothing out of a magazine and place on paper. Glue in place. Using magic markers or crayons, add a person and then draw a scene around the person.

Title: Wet Paper Chalk Drawings

Materials: Colored chalk, paper, pan of water and newspaper

Procedure: Cover the table with newspaper. Dip the paper in water. Put the paper on the newspaper. Draw with chalk. Variations: Dip the chalk in the water and apply to dry paper.

Title: Salt Box Drawing

Materials: Salt in a long thin box, pan, or cookie sheet

Procedure: The child draws a design of picture using his/her finger. (Sand, oatmeal, cornmeal, etc. can be used in place of salt.)

Title: Fingerprint Doodles

Materials: Stamp pad, crayons, markers or pencils, paper

Procedure: Child makes fingerprints on paper and then turns them into a picture or design with markers, crayons or pencils.

Title: Magic Scribbles

Materials: Cardboard, butcher paper, crayons, recorded music

Procedure: Put cardboard letters or numerals under a sheet of butcher paper. (Also leaves, cardboard shapes, etc. can be used.) Children "scribble" on paper to music. As the scribbles become dark, the shapes underneath the paper emerge. Should the shapes move secure them to surface with tape.

Title: Crayon Etching

Materials: Wax crayons, manila paper, scraping tool such as scissors

Procedure: Cover surface of paper with a heavy coat of brightly colored crayons. Crayon over the brightly covered surface with black or a dark color. Scratch the dark surface with scraping tool into a definite design.

Title: Crayon Resist

Materials: White construction paper, water colors or diluted tempera paint, brushes, crayons

Procedure: Draw a picture (such as flowers, animals) using crayons. Brush with water colors or diluted tempera. Remind the children to bear down hard for this activity.

Title: Lip Print Pictures

Materials: Lipstick, markers, paper

Procedure: Child makes lip print on paper and turns it into a picture or design with markers. This is a variation of Fingerprint Doodles. Footprints may also be used for picture designs.

Given below is a sample letter for teachers to send to parents. It allows parents to participate in their child's educational experience and provides the teacher with free resources.

Dear Parents,

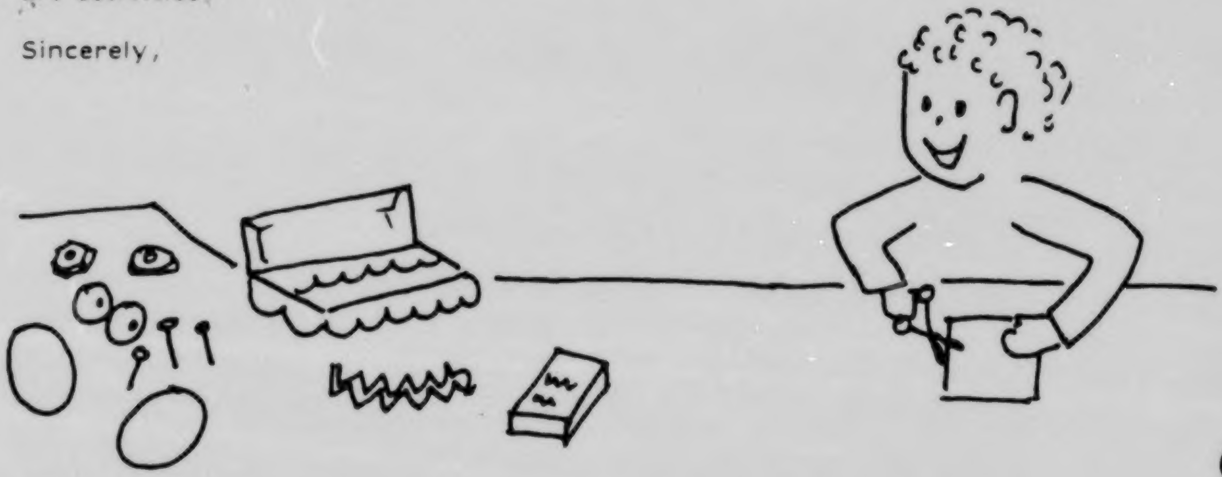
Our Kindergarten art program utilizes many "throw-away" items. If you have any of the following items that you would be willing to donate, please send them with your child:

styrofoam meat trays
egg cartons
aluminum pie pans
beads
buttons
caps and lids from jars, tubes, bottles
spray cans, etc.
cardboard
small cereal boxes
round out meal containers
coffee cans with lids
fabric scraps and sewing trim
(ribbon, fringe, etc.)
styrofoam packing bits
clean old socks and panty hose

oleo tubs and lids
nuts, bolts, washers, screws, nails
sandpaper
wallpaper scraps
sponges
yarn
"Legg" eggs
strawberry baskets
fruit dividers
old catalogs and magazines
newspapers
greeting cards
used computer paper
corks
lumber scraps

We also welcome anything else that you think might be fun to utilize in creative art activities.

Sincerely,



ART SUPPLIES

(For 1 Year/Class of 25 Children)

Item	Description	Amount
BRUSHES	¼" wide, long handled	18
Painting brushes	½" wide, long handled	18
	water-color brushes	25
	large (house paint) brushes	3
CLAY		
Plasticine or oil base	1 lb. packages	4
CRAYONS	8 color boxes of wax crayons	25 boxes
CHALK	Extra large colored sticks	1 box
FASTENERS	Brass paper fasteners	4 boxes
FINGER PAINT	ready mixed	
	red	2 jars
	blue	2 jars
	black	1 jar
	yellow	1 jar
GLUE	Elmer's (1 gal. containers)	2 gal.
	rubber cement (small)	3 jars
	library paste (small)	3 jars
MUSLIN	unbleached	5 yards
NEEDLES	tapestry (large eye, blunt point)	10-12
PAINT	1 lb. cans powder paint	
	red	2 dox. cans
	blue	2 doz. cans
	yellow	2 doz. cans
	green	2 doz. cans
	orange	2 doz. cans
	purple	1 doz. cans
	brown	1 doz. cans
	black	1 doz. cans
	white	1 doz. cans
PAPER	newsprint, 18" x 24"	5 packages
	500 sheets per package	
	newsprint 12"x 18"	2 packages
	500 sheets per package	
	manila, 12" x 18"	1 package
	500 sheets per package	
	manila, 8" x 12"	1 package
	500 sheets per package	

	white drawing paper	1 package
	500 sheets per package	
	36' white wrapping paper	1 roll
	colored construction paper	
	(12" x 18") packages	
	black	2 packges
	red	4 packages
	yellow	5 packages
	blue	4 packages
	assorted	3 pacakges
	green	5 packages
	purple	2 packages
	white	2 packages
	orange	3 packages
	brown	1 package
	tissue paper	
	assorted color package	
	(100 sheets, 20" x 30")	
	5 each of 20 colors	1 package
YARN	variegated	1 skein
	red	1 skein
	yellow	1 skein
	green	1 skein
	blue	1 skein
	black	1 skein
SCISSORS	4" blunt or medium point quality scissors	25
	lefty scissors	4
	teacher's large	1
HOLE PUNCH		1-5
STARCH	liquid prepared	2-5 gallons

Suggestions for additional materials:

- fabric crayons
- fadeless bulletin board paper
- bordette (for bulletin boards)
- water color markers
- pencils
- homemade play dough
- pipe cleaners (colored)
- poster board

Refer to Equipment and Materials section in this resource book for further suggestions.

TITLE	Eye Hand Coordination	Fine Motor Development	Color Recognition	Shape Recognition	Visual Perception	Number Recognition	Alphabet Recognition	Sequencing Skills	Classification Skills	Creative Thinking	Decision Making	Pre-writing Skills	Number Concept	
Paint Blots		•	•		•					•	•	•		
Clorox Painting	•	•			•	✓	✓			•	•	•		prediction observation bleaching process
Squeezy Painting	•	•	✓		•	✓	✓			•	•	•		
Marble Painting	•		✓							•	•			
Water Painting	•	•			•	✓	✓			•	•	•		observation - evaporation
Soapsuds Paint	•	•				✓	✓			•	•	•		sensory awareness
Roll Painting	•	•	✓	✓	✓	✓	✓	✓		•	•	•		
Printing	•	•	•	•	✓				✓	•	•	•		
Newspaper Painting	•	•	✓	✓	•	✓	✓						✓	
Shaving Fingerpaint	•	•			•	✓	✓			•	•	•		sensory awareness
String Surprise	•	•	✓		✓					•	•			
Dip 'n Dye	•	•	•		✓					✓				observation - absorption
Shrink Art	•	•								•	•	•		observation - effects of heat
Stained Glass	•	•	•					✓	•	•	•	•		concept - translucent
Egg Carton Sculpture	•	•			✓			✓	✓	•	•	•	•	
Coat Hanger Mobiles	•	•		✓		✓	✓			•	•	•	✓	self-concept
Me Mobile														self-concept body awareness
Stuffed People/Animals	•	•								•	•	•		
Cooked Play Dough	•	•	•	✓		✓	✓	✓	•	•	•	✓	✓	sensory awareness slight vocabulary numeral recognition how heat changes ingredients measurement skills concept development
Uncooked Play Dough	•	•	•	✓		✓	✓	✓	•	•	•	✓	✓	
Candy Clay	•	•	•	✓		✓	✓	✓	•	•	•	✓	✓	
Sawdust Clay	•	•	•	✓		✓	✓	✓	•	•	•	✓	✓	
Bakers Clay	•	•	•	✓		✓	✓	✓	•	•	•	✓	✓	
Touch-It Pictures	•	•	✓	✓	•	✓	✓		•	•	•	✓	✓	
Tissue Design	•	•	✓							•	•	•		
Torn Paper Picture	•	•	✓	✓	✓				✓	•	•	•		
Paper Bag Puppets	•	•								•	•			self awareness
Torn Paper Monsters	•	•								•	•			
Nature Collage	•								•	•	•			observation skills
3-D Strip Collage	•	•	✓		•					•	•	•		
Collage	•	•	✓	✓	•	✓	✓		•	•	•	✓		sensory awareness
Halloween Jack-O-Lantern	•	•	✓		✓					•	•	•		
Fall Leaf Rubbings	•	•			•				✓	•	✓	✓		observation - leaf parts
Thanksgiving Costumes	•	•			✓					•	•	✓		
Christmas Ornaments	•	•	•	✓										
Valentine People/Animals	•	•						✓		•	•			
Spring-egg carton tulips	•	•	✓					•						following directions
Cylinder Rabbits	•	•								•	•			
Candle Holders	•	•	✓											
Sewing on Burlap	•	•		✓		✓	✓			•	•	•		
Yarn Weaving	•	•			•			✓				•		following directions
Fabric Collage	•	•	✓	✓	✓				✓	•	•			sensory awareness
Fabric Designing	•	•	✓	✓	✓	✓	✓			•	•	•		
Complete a Picture	•	•			•					•	•	•		whole - part relationship
Add-a-person picture	•	•			•					•	•	•		whole - part relationships body awareness
Wet paper chalk	•	•	✓							•	•	•		
Salt Box Drawing	•	•		✓		✓	✓			•	•	•		sensory awareness
Fingerpaint Doodles	•	•			•					•	•	•		
Magic Scribbles	•	•		✓	✓	✓	✓					✓		
Crayon Etching	•	•						✓		•	•	•		
Crayon Resist	•	•								•	•	•		observation - wax repels water

Key • indicates that the activity promotes that skill
✓indicates that the activity is conducive to promoting the skill with the teacher extending it some

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Science

RATIONALE

Children are natural scientists. The beauty and wonder that surrounds them in nature encourage curiosity. Preschoolers are ready to learn and implement the scientific process and educators should begin to lay the foundation upon which future scientific competence can be built. Science experiences for young children should include activities that facilitate intellectual and conceptual development.

CONCEPT LEARNING

1. The properties of air are:
    a. It takes up space.
    b. It is visible.
    c. It moves objects.
    d. It expands and rises when heated.
2. The properties of water are:
    a. It freezes into air at 32°F.
    b. It takes the shape of its container.
    c. It evaporates into the air.
    d. It changes into steam when heated to the boiling point.
3. All animals are born from an egg.
4. Animals need food, water, air, sleep, exercise and shelter.
5. We have many ways to learn about our world: eyes to see, tongue to taste, nose to smell, ears to hear, skin to feel and the ability to move.
6. Plants need water and light.

SELECTED VOCABULARY

terrarium
oxygen
thermometer
shelter
insect
pinwheel
liquid
residue
root system
bulb
primary
specimen
evaporate
solid
steam
temperature

INSTRUCTIONAL TECHNIQUES

Science opportunities should be provided daily on both an individual basis and in large groups. Every classroom should have a science corner where children are afforded the freedom to explore, discover, wonder, solve problems, think critically, and make decisions. In efforts to develop the "whole child", educators should strive to equip children for survival in the world in which they live. The procedure given for the activities listed is intended to serve as direction to the teacher as she/he works with the children in conducting the activity. Discussion and explanation of concepts as activities are conducted with the children provide opportunities for expansion of thoughts and language by the learner.

INSTRUCTIONAL MANAGEMENT

The following statements are examples of behavioral objectives that could be written as the instructional management plan for science is developed.

The children will be able to distinguish animals from other living organisms when shown a picture of living matter.

Given the name of an animal, the students will be able to name, identify, or describe the type of shelter (home) in which it lives.

GENERAL MATERIALS

plants
bowls
thermometers
jars
containers of all sizes
balloons
animal pictures
filmstrips
straws
dirt
hot plate

SENSES

Title:	Hot and Cold Temperatures
Objective:	Using a bowl of warm water, one of cold water and a thermometer, the child will identify temperature changes in the two containers
Materials:	2 bowls, very warm and cold water, thermometer
Procedure:	Put very warm water in one bowl and cold in the other. Child puts the thermometer in one at a time and watches the mercury go "up" and "down". Reinforce the concept that when the mercury goes up, that means the temperature is going up or indicative of warmer than when it goes down, thus indicating colder temperature.
Evaluation:	Teacher observation and record charts which students complete.

Title:	Feely Box
Objective:	After feeling an object in the box, the child will verbally describe the object.
Procedure:	Put objects in the box. Child reaches into the box through the hole and describes the objects. The teacher should ask questions about the texture of the object (hard, soft, stiff, bumpy, etc.) Change objects regularly.
Evaluation:	Teacher observation of child's responses.

Title:	Smelling
Objective:	After smelling four containers with different substances, the child will match the smell to the picture of the substance.
Materials:	Containers (baby food jars, plastic paint containers, margarine tubs); onions, cinnamon, cloves, cocoa, perfume, coffee, soap, peanut butter.
Procedure:	Teacher makes a variety of smelling containers by putting a different item in each opaque or painted jar. Puncture the lids. Children sniff the containers and guess what each contains. Then the child puts the container on the picture identifying the smell.
Evaluation:	Teacher observation of child correctly matching the container with the picture.

Title: Tasting Party

Objective: After tasting four substances, the child can identify each.

Materials: Variety of common foods: apple, popcorn, bread, dry cereal, pickles, peanut butter, etc.

Procedure: Blindfold the child. Put a small amount of food in each child's mouth. Have the child guess what they are tasting. Variation: Have the child hold his/her nose as well as close his/her eyes. Place food in the child's mouth and have him/her guess what the food is. Smelling is closely related to tasting.

Evaluation: Teacher observation as child is directed to point to the picture of the food he thinks he just tasted.

Title: Color Mixing

Objective: After child mixes red and blue, red and yellow, and blue and yellow, she/he will verbalize which secondary color will be produced.

Materials: Food color, water, baby food jars, medicine dropper, styrofoam, white egg carton.

Procedure: Make a strong solution of water and food coloring of the primary colors (red, yellow, blue). Put each color in a baby food jar. Put medicine dropper in each jar. Child squeezes the dropper to get liquid and squirts it in a section of the egg carton. The child discovers the colors that can be made.

Evaluation: Teacher observation and child responses. Children may record color changes by graphing construction paper in the following manner: a red square + a blue square = a purple square.

Title: Thumbprints

Objective: Through comparing thumbprints the children will visually identify that each is unique.

Materials: White paper, ink pad, and magnifying glass

Procedure: Let each child made a thumbprint. Use the magnifying glass and look at them. Talk about how each is different. Look at the ridges and loops on the fingerprint. Variation: Give each child a lemon. Tell them to look at their lemon very closely for one minute. Then start passing lemons around. Each child must find his/her lemon. Each lemon is unique.

Evaluation: Teacher observation and/or a thumbprint chart of the class with each print and the name of each class member so comparison will occur.

Title: The Pupil of Our Eye

Objective: After looking at a classmate's eyes in the dark and in the light, the child will verbalize that the pupil opens to let in more light and closes to keep out the light.

Materials: Dark room or closet, mirror

Procedure: Put up a drawing of the eye and talk about the parts and their function-eyebrow, eyelashes, iris, and pupil. Discuss how the pupil lets the light in. Look at each others eyes in the light and notice the size of the pupil. Take a few children at a time into a dark room or closet and slowly close the door. They can see the pupil getting bigger as it gets darker.

Evaluation: Teacher observation and children's responses.

Title: Matching Sounds

Objective: Child will match the cans which make the same sound when shaken.

Materials: Empty 35 mm film cans or empty babywipe containers, various substances such as salt, pennies, gravel, golf tees, beans, etc.

Procedure: Teacher will make pairs of cans with matching sounds. Secure the lids on the cans. Child will shake the cans and find the two with the same sound.

Evaluation: Teacher observation of the way the child matches the can.

PLANTS

Title: A Child's Terrarium

Objective: To show responsible behavior in the maintenance of a plant

Materials: Two liter clear plastic coke bottle, dirt, plants and very little water.

Procedure: The teacher will have the children bring a plastic coke bottle to class. The teacher will cut the neck off of the bottle and discard it. Remove the black rim from the bottom of the bottle. Add dirt and a small amount of water. Each child will plant a plant in the rim. Place the clear plastic over the plant. The child will place the terrarium in the window.

Evaluation: Teacher observation of child's behavior as he/she nurtures the plant.

Title: Plants Need Light

Objective: To demonstrate that plants need light to survive. The child will be able to verbally explain the effect the absence of light has on living plants.

Materials: Flowerpot

Procedure: On a warm day, the teacher will take the class outside to a place where grass is growing. He/she will then turn a flowerpot over a small patch of grass. The teacher will explain how this grass will not be getting any sunlight for a few days. In a few days the class will check the spot that has been covered. The teacher will ask questions regarding the changes observed.

Evaluation: The children will make verbal observations on several occasions about the grass under the pot. The teacher will observe and record the responses of the children on an experience chart.

Title: Stages of a Seed Sprouting

Objective: To demonstrate the stages of a seed sprouting.

The child will name the necessary environmental elements that must be present for a seed to sprout.

Materials: Paper towel, glass, bean seeds and water

Procedure: The teacher will fold a paper towel, roll it up and stand it in a glass. Put the bean seeds between the towel and glass. The towel will hold them in place. She will then pour a little water into the glass so it will soak into the towel. After several days in the dark the bean seeds will begin to sprout and grow. The children can observe and record growth through the glass.

Evaluation: Teacher observation of responses during the activity and checking recorded growth charts completed by the children. Children may develop individual picture sequence charts illustrating the necessary elements and steps to follow for the bean to sprout.

Title: Plants Release Oxygen

Objective: The child will observe that plants release oxygen.

Materials: Plants, jar of water and gravel

Procedure: Place two plants in a jar of water. Put gravel in jar to hold down the roots. Place the jar in the sunlight. Discuss bubbles appearing in the jar.

Evaluation: Observe the child's response.

Title: Watching Plants Drink

Objective: The child will observe how plants take water into their system.

Materials: Container, celery stalk, water, food coloring, recording chart

Procedure: A celery stalk will be placed by the student in a cup of colored water (dark colors - red or blue are best). Food coloring may be used to color the water. Every few hours each student will observe the change which takes place in the celery and record those changes.

Evaluation: Discuss how the plant takes in water and observe student record sheets.

Title: The Stages of a Flower

Objective: The child will identify the stages of a flower from bulb to bloom.

Materials: Flat bowl, small rocks, water and 6 paper-white narcissus bulbs.

Procedure: Place the bulbs in the bowl and pack rocks around them. Pour in enough water to cover the rocks. Keep bowl in a dark place for a day or two. Take the bowl to a sunny window. The bulbs will grow and bloom.

Evaluation: Observe the growth of the bulbs each day. Record the growth on a chart.

Title: The Rooting Process

Objective: The child will examine and record growth of the roots of a plant.

Materials: Jar of water, sweet potato, tape measure, record chart, pencil

Procedure: Submerge the bottom half of a sweet potato in water. Place in sunlight. In about 5 days study the root buds and growth thereafter.

Evaluation: Observation of children as they examine the root system of a plant. Allow the children to measure and record root growth on a chart.

Title: The Shapes Nature Makes

Objective: The child will be able to match nature's shapes with geometric shapes such as a circle, square, triangle, and rectangle.

Procedure: Children are given shape cards. During a field trip around the playground the children are instructed to find leaves, sticks, plants, or any other natural object that match the shape cards they were given. When all the shapes have been found the children are to assemble and glue one object on a large poster board sectioned off on the basis of shape (the square shape section, the circle shape section and so forth).

Materials: Poster board, shape cards, glue, nature objects

Evaluation: The child will match the shape cards with nature objects found. The objects will be glued on a poster board in the proper shape category. Children may find nature objects which fit in more than one category. Discuss the child's reason for category placement before judging his/her choice to be incorrect.

AIR

Title: Miraculously Dry Napkin

Objective: The child will be able to demonstrate that air takes up space.

Materials: Bowl full of water, paper napkin, drinking glass

Procedure: Fill a bowl with water. Stuff a paper napkin inside a drinking glass. Turn the glass upside down and push it into the bowl of water. Hold the glass perfectly straight. Watch the sides of the glass go down into the water. Now lift the glass straight out of the water. Pull out the paper napkin. It is perfectly dry! Why? The glass was full of air. Air was all around the napkin in the glass. The water could not touch the paper napkin. The water only touched the air around it.

Evaluation: Observation of task as children repeat procedure and explain what happened

Give verbal responses that air takes up space when asked, "Why didn't the napkin get wet?"

Title: Magic Jug

Objective: The child will be able to demonstrate that air expands as it get warmer.

Materials: Empty glass jug, refrigerator or ice chest of ice, balloon

Procedure: Put an empty glass jug in the refrigerator or a cold ice chest for at least an hour or until it chills thoroughly. After taking out the cold jug, stretch the neck of a balloon over the mouth of the jug. The balloon will begin to expand mysteriously. Why?

At first, the air from the jug is very cold. The warmth in the room immediately starts to warm the jug and the air in it. The air in the jug expands as it gets warmer. It expands into the balloon.

Evaluation: Children can record expansion of the balloon through string measurement of the circumference.

Give verbal answer that heated air expands and rises when asked, "Why did the balloon blow up?"

Title: Fantasy Fountain

Objective: The child will be able to demonstrate that air pressure is reduced as air cools.

Activity Objectives: To discover that when pressure inside the jug falls below pressure outside the jug, the cold water in the can is forced upward, each time that the water flows up into a fountain.

To ascertain that cold water can cool warm air each time that the air in the jug is cooled by the cold water.

Materials: Gallon jug with screw cap, plastic drinking straw, candle, coffee can, ice cubes, hot water

Procedure: In the middle of a jug's cap, poke a hole large enough for a straw. Push through the hole all but an inch or so of straw. Use dripping candle wax to seal the straw.

Fill an empty coffee can with water and ice cubes. Fill the jug with very hot water letting it run over the sides in order to heat the jug. Pour the water out of the jug. Screw the cap with the straw in it tightly onto the jug. Turn the jug upside down onto the coffee can with the short end of the straw in the ice water.

A fountain of water will spurt up out of the straw inside the jug! Why? As the hot jug cools, the air pressure in it is reduced. When the pressure inside falls below the pressure outside, the cold water in the can is forced up through the straw. It makes a fountain! As the water cools the air in the jug even more, the fountain flows faster!

Evaluation: In a given situation the child should verbally respond that as air cools, the pressure is reduced and that when pressure inside the jug falls below pressure outside the jug, the cold water is forced up into a fountain when asked, "What made the fountain?"

To verbally respond that cold water can cool warm air when asked, "What cooled the air?"

Title: The Invisible Mover

Objective: The child will demonstrate that air moves objects.

Materials: One aluminum can, a drinking straw, one balloon, a rubber band

Procedure: Place a can on a table. Ask the child to try to blow the can over. Direct and demonstrate to the children as you work together:

Now, fasten the end of a drinking straw to a balloon with a rubber band. Lay the balloon on the table. Place the can on top of it. Blow air through the straw into the balloon. What happens to the can? It moves! The air that you blew into the balloon pushed it over.

Evaluation: Observation of task as children complete procedure

Give verbal answer that air moves objects when asked, "Why did the can fall over when you blew into the straw?"

Title: Balloon Blow Up

Objective: The child will demonstrate that when certain substances are combined in proper proportion a gas is made.

The child will demonstrate that gas takes up space.

Materials: Empty catsup or soda bottle, vinegar, baking soda, balloon

Procedure: Put one (1) inch of vinegar in the bottle. Add two (2) teaspoons of baking soda. Then quickly slip the balloon over the top of the bottle. Ask the children: What happens? Does the balloon inflate? Why?

When vinegar and baking soda are mixed, they change and make a gas. The gas blows up the balloon. Smell the air as you let it out of the balloon.

Evaluation: Observation of task as children complete procedure

Give verbal response that vinegar and baking soda combine to form a gas when asked, "What did the vinegar and baking soda make?"

Give verbal response that gas takes up space when asked, "Why did the balloon inflate?"

Title: Is An "Empty" Can Empty?

Objective: The child will develop an awareness that air is invisible.

Materials: Hammer, nail, aluminum can, dishpan of water

Procedure: Ask the children to examine the can. Ask the children if there is anything in it.

Punch a hole in the can using a hammer and nail. Ask the children if there is something in the can, could we push it out through the hole? Invite them to find out. Invert the can. Slowly push into the water. Ask the child(ren) to place his/their hands above the hole. Ask: "What's being pushed out of the can?" Was the can really empty?

Evaluation: Observation of task

Manipulative response of feeling invisible air that comes out of hole in can when told to invert can into water.

To verbally respond that air was in the can and is almost everywhere when asked, "What was in the can? Is air in any other place?"

Title: The Mysterious Disappearance

Objective:

(1) The child will demonstrate that exposure to air causes water to evaporate

(2) The child will demonstrate that water evaporates more quickly when more air can touch the water surface.

(3) The child will be able to measure ½ cup correctly at the initial time when the water is put into the container.

Materials: Saucer, jelly glass, bottle, water, masking tape

Procedure: Put ½ cup of water in a saucer, in a jelly glass, and in a bottle. On each container, mark the edge of the water with a little piece of masking tape. Instruct students to measure the water level every day for a few days by putting a piece of tape on the glass at the water level.

Discuss the following questions: Is the water disappearing from each container? From which container is it evaporating more quickly? What causes this?

In the discussion make the following points: The water is going into the air. When water goes into air, we call it evaporation. Water in the saucer evaporates faster than the other containers because more air can touch the water in the saucer. Water in the bottle evaporates more slowly because very little air can touch the water. Air causes water to evaporate.

Evaluation: Observation of task; measurement of water level

Give verbal response that air causes water to evaporate (go into the air) when asked, "Why did the water disappear?"

Give verbal response that water evaporates more quickly when more air touches it when asked, "Why did the water in the saucer evaporate more quickly?"

Manipulative response of measuring ½ cup correctly when told to put ½ cup water in each container.

Title: Glass Magic

Objective: The child will be able to demonstrate that air presses in all directions.

Materials: A glass full of water, a piece of cardboard

Procedure: Direct the children to cover the whole mouth of the glass of water with a piece of cardboard. Ask them to hold the cardboard in place and turn the glass upside down. The cardboard stays in place because the child's hand is holding it.

Instruct the child to take his/her hand from the cardboard. The cardboard will stay in place as if glued there! The water doesn't pour out!

Turn the glass on its side. The cardboard still stays in place! The water still doesn't pour out! Ask the children why the water doesn't pour out. An easy explanation is that air is pressing against the cardboard. It presses so hard that the water can't get out!

Evaluation: Observation of task ask children complete procedure

To verbally respond that air is pressing on the cardboard when asked, "Why doesn't the water fall out?"

To verbally respond that air presses in all directions when asked, "Why did the water stay in the glass when it was upside down and when it was on its side?"

Title: Pinwheel Fun

Objective: The child will correctly make a pinwheel with verbal and manipulative instructions from the teacher each time she/he is given the materials needed.

The child will be able to verbally define wind.

The child will demonstrate that wind moves objects.

Materials: Six (6) inch square paper, ruler, pencil, thumbtack, stick

Procedure: Demonstrate and assist the students in constructing the pinwheel in the following manner: With a pencil and ruler, draw light lines to connect opposite corners. The lines will cross in the center of the square. Mark each corner A, B, C, and D. Put a dot on each line one inch from the center. Cut on each line from the outside corner of the dot. Bend A over to touch the center. Do the same for B, C, and D. Put a thumbtack through the four points and the center. Fasten this thumbtack on a stick. You've made a pinwheel!

Instruct the children that they may blow air against their pinwheel to make it turn. Take it outside and observe the effect the wind or lack of it has on the pinwheel. The harder the wind blows, the faster your pinwheel will turn! What is wind?

Evaluation: Observation of task as children complete the procedure

Construction of a pinwheel when given materials and verbal and manipulative instructions.

Give verbal response that wind is moving air when asked, "What is wind?"

Give verbal response that wind is, or is not, blowing by observing pinwheel and answering question, "Is the wind blowing now?"

Title. The Obstinate Balloon

Objective: The child will demonstrate that air takes up room.

The child will demonstrate that she/he can move air.

Materials: Two (2) tin cans without tops or sharp edges, two (2) long sausage--shaped balloons, nail, hammer, soapy water.

Procedure: With the children make a small hole in the bottom of one can. Blow up the two balloons until they are slightly wider than the two cans. Make one balloon slippery with soapy water. Direct the children to ask a friend to stuff the soapy balloon into the can without the hole in the bottom. Rub the other balloon with soapy water. Hold it tightly against the end of the other can (the one with the extra hole). Direct the children to put their mouth to the hole in the bottom and draw in a breath. Watch! The balloon will pop into the can! You may explain when the friend tried to push the balloon into his can, the balloon trapped some air inside the can. The air squeezed together until it resisted further pushing.

Explain to the students that this can was different! When they drew out the inside air through the hole in the bottom of the can, nothing was left to block the balloon. So the push of the outside air pushed the balloon right into the can!

Evaluation: Observation of task as children complete the procedure

Give verbal response that air takes up room when asked "Why couldn't you push the balloon in the can without the hole?"

Give verbal responses that we can move air by drawing in a breath when asked, "Why did the balloon pop into the second can with the hole?"

Title: Dancing Garden

Objective: The child will be able to demonstrate that energy is found in carbon dioxide.

Materials: Goldfish bowl, jar, measuring cup and spoons, vinegar, baking soda, water, mothballs, buttons, beads, stones

Procedure: In a large jar let the children mix 3 cups water, 2 tablespoons baking soda, and 1 cup vinegar. Pour in the goldfish bowl slowly to make gas. TEACHER adds 21 mothballs. The balls will bounce up and down, fizzing as they go. Buttons, beads, and stones added to the mixture will bounce up and down also. When the bubbling stops, reactivate with a sprinkle of soda.

Evaluation: The child will arrange sequence cards to demonstrate the sequence and order of events which took place that demonstrate that energy is found in carbon dioxide.

ANIMALS

Title: What is an Animal?

Objective: The student will be able to distinguish animals from other living organisms and state that people are one type of animal.

Materials: Pictures of plants, such as flowers, grass, and a tree; pictures of animals, such as a dog, a horse, and a grasshopper

Procedure: Display the pictures and discuss the names of the things depicted in them. Ask the students, "How are all these things alike?" Ask the students to separate the pictures into groups that contain similar things. Help the students to separate the pictures of animals from the pictues of plants. Ask the students to name each group of living things. Ask the students how animals are different from plants.

Evaluation: The teacher will observe students' responses during the class activity or she/he may individually show a picture to each student and ask him/her to decide whether it is an animal or a plant. When asked the question, "Are people animals or plants?", the student will correctly respond with the word "animals."

Title: Where Do Animals Come From?

Objective: The students will be able to state that animals develop before birth in a protective environment.

Materials: Pictures of a variety of eggs (bird, reptile, fish); a raw egg; chicks hatching kit available from the county agent; clear container

Procedure: Show pictures of the different kinds of eggs, telling the students what kind of animal produced each. Pass around the raw egg, telling the children to handle it carefully. When all the children have held the egg, crack it into a clear container so the children can see that the egg has different parts. Name, explain and discuss each part and what it does to help the baby grow. In the days that follow, the children will be able to experience the hatching of the eggs and then watch the eggs hatch into chicks.

Evaluation: The children will record the development of the baby chicks on a chart. Following the hatching the children will be asked to explain the record kept.

Title: What Do Animals Need to Grow?

Objective: The students will be able to name four of the five things that animals need in order to grow (food, water, air, sleep, exercise).

Materials: Picture books about pets or children caring for pets

Procedure: Spend a few minutes talking about their pets and then read a book about pets or children caring for pets.

Ask the children to name some things that pets and other animals need in order to grow and live healthy lives.

Ask the children, "Do your parents make sure that you have food to eat and milk or water to drink every day? Do you run and play to exercise your body every day? Do you go to sleep each night, and do you breathe air all the time, even when you are asleep?" Help the children to generalize that they need the same things as all other animals in order to grow and live healthy lives.

Evaluation: When asked "What do you need in order to grow?" the students should be able to name at least four of the five requirements: food, water, air, sleep and exercise.

Title: Where Do Animals Live?

Objective: Given the name of an animal, the students will be able to name or describe the type of shelter (home) it lives in.

Materials: Films or filmstrips about various animals; examples of animals' "homes," such as a bird's nest, a bee hive or wasp's nest; picture of animals on a farm.

Procedure: Discuss the term shelter, and why it is important: to keep animal safe, to store food, to protect young ones, to get out of bad weather, to have some place to sleep. People live in houses. If we have pets, they can live in the house with us or in a special place we provide for them such as a dog house or a bird cage.

What animals live on farms? The children should name animals such as cow, chicken, horse, pig. Tell the children that though pets and farm animals have homes provided for them, most animals have to make or find their own homes. Show the children films or filmstrips, telling them to look for the types of homes that these animals have. Afterwards, discuss what they have seen. Some examples might be a bird nest, bee hive, beaver dam, ant den, bear cave, lion lair. Display any examples of animal's homes that you have available. A field trip to the zoo or farm would be an excellent means to bring first-hand experiences into teaching the objectives.

Evaluation: Give each student an opportunity to respond by telling him/her the name of an animal that was discussed in this lesson and asking him/her to name or describe the type of shelter (home) it lives in. Match up puzzles with the picture of the animal on one puzzle piece and his shelter on the corresponding piece can be utilized in evaluating the child.

Title: What Kind of Animals Live in the Sea?

Objective: The students will be able to name three kinds of animals that live in the sea or on the seashore.

Materials: A variety of seashells; dried aquatic animals, such as seahorses, starfish, blowfish; pictures of sea animals.

Procedure: Tell the children that many different kinds of animals make their home in the sea. Ask the students to name some examples. If the students can not think of any animals except for fish, display the dried aquatic animals, giving the names of each animal and saying that these animals also live in the sea. Show pictures of other animals that live in the sea or on the seashore. Examples are: octopus, whale, eel, dolphin, crab, snail, clam. Display the shells and tell the children that small animals once lived in the shells. The shells were their "homes" that they carried around with them. Sometimes when these small animals die or leave the shells, other animals like the Hermit Crab will use these shells as their homes. Make a trip to the shore, if possible.

Evaluation: Ask the students to name some animals that live in the sea or on the seashore. If asked separately, each student should be able to name at least three different animals. Students could draw a seaside picture depicting three of the animals discussed.

Title: What Are Insects?

Objective: The students will be able to identify insects by determining whether or not it has six legs and two feelers on its head.

Materials: Book or filmstrip on insects; examples of live "bugs" that have been collected by the children; plastic containers with lids.

Procedure: Take a walk around the school yard and collect a variety of "bugs." After they are collected, make sure that each child or each group of children has one in a clear container with a lid. (Plastic cups covered with plastic wrap and a rubber band may be used.) Tell the children that there is a special name for certain kinds of very little animals, and this word is "insect."

Show the children a large picture of an insect from the book or filmstrip. Have the children count the legs and then count the feelers as you point to them in the pictures.

Ask the children to inspect their specimen to see if they have feelers and to count the number of legs. Let each child or group of children say whether their little animal is an insect or not.

Evaluation: The students will be able to tell whether or not each sample is an insect using the criteria of number of legs and absence or presence of feelers on the head.

Title: What Are Spiders?

Objective: Given a specimen of an insect and a specimen of a spider, the students will be able to distinguish the spider based on the criterion of the number of legs.

Materials: Picture of a spider; live specimen of spiders; large clear container to be used as a terrarium; lid or cover for terrarium, dirt and plants from outdoors; picture of insect from previous lesson.

Procedure: Show the students the picture of the insect from the previous lesson and review the distinguishing criteria of having two feelers and six legs. Tell the children that there is another group of very small animals called "spiders."

Show the picture of the spider next to the picture of the insect and compare the similarity and difference between the two. Take the children to the school yard to collect some dirt and small plants or weeds to make their terrarium. Put in the spiders and some of the smaller insects collected from the previous lesson. Place a secure lid over the terrarium. Tell the children to watch to see if the spider will spin a web. (As not all spiders spin webs, it may be necessary to choose another sample.) (Please note: children should not be asked to bring in spiders as there are two species of poisonous spiders in North America--Black Widow and the Brown Recluse. Children should be cautioned not to handle spiders until they are old enough to distinguish these spiders from the others.)

Evaluation: The children will recognize spiders as having eight legs, no feelers, and no wings. When shown a specimen of a spider and a specimen of an insect, each child should be able to correctly identify the spider, giving the reasons for this decision.

WATER

Title: Making Icicles

Objective: The child will make icicles.

Materials: A tree with low branches, water hose attached to faucet, hand sprayer

Procedure: Check outside thermometer to ensure it is 32° or below. Attach hand sprayer to the hose. Lock the sprayer into position to make a light spray. Tie hose and sprayer into the tree. Allow children to make periodic checks to see if icicles are forming. When icicles have formed turn off the water. Allow children to select an icicle, break if off, and taste it, and watch it melt.

Evaluation: Observe the procedure.
Verbal responses to questions:

a. What did we make icicles out of?
b. How did we make them?
c. What did the water do?
d. How cold did it have to be before the water would freeze?
e. What happened when you held the icicle in your hand?

Expanded Concept: Allow children to assist in filling a greased rubber glove (greased inside) with colored water. Set upright in a freezer. Allow 24-36 hours for "ice hand" to become solid. Glove is carefully removed and hand examined by all.

Title: Measuring Water

Objective: The child will be able to pour liquid from one container to another.

The child will be able to predict which container holds more or less than another when filled with a liquid.

Materials: Pitcher of water, 1 cup measuring cup, various sizes of jars, glasses to pour water into, chart labeled with stickers to match glasses and bottles, plastic table cloth to sit on while doing experiment, small dish pan to put glasses and bottles in.

Procedure: Let children tell which glass they think will hold more water. Allow children to pour water into the glasses from the measuring cup. Let them count the number of cups it takes to fill the glasses or bottles.

Evaluation:

1. Use glasses with cartoon characters on them and a simple chart to mark with stickers.
2. Which held MORE, Snoopy (sticker) or Smurf (sticker)? ____________________? (place sticker)
3. Which held LESS Pac Man (sticker) or Garfield (sticker)?
4. Which ones were the SAME? (sticker) ________________ and (sticker) __________________

Answer questions as they are measuring such as:

1. Do you need more water to fill the glass?
2. If you went over the full line do you need MORE or LESS water?

Title: Liquid to Solid

Objective: The child will change a liquid into a solid.

Materials: Water, Kool-aid, pitcher for mixing Kool-aid, variety of sized objects, tongue depressors, measuring cups

Procedure: Assist the children in making Kool-aid by the recipe. Let child choose a container to fill with liquid Kool-aid: hollow blocks, small pieces of orange juice cans, popsicle tray, small plastic cups. Insert tongue depressors. Put objects into freezer or outside window if temperature is low enough to freeze it. Eat it!

Evaluation:

1. Observe children.
2. Make experience chart.
3. Be able to explain what happpened.
4. Use and define terms
    a. liquid
    b. solid
    c. froze
    d. changed

Answer questions:

a. How much water did we add to Kool-aid?
b. How much Kool-aid did you put into your cup to freeze?
c. What happened to the water when it froze?

Title: Sink or Float

Objective:

1. Given a series of objects, the child will determine those that sink and those that float when put into a container filled with water.

2. The child will demonstrate observation skills.

Materials: Tagboard 10" x 14", ruler, colored markers, pencil, clear contact paper, items to put in water: rock, nail, leaf, cork, pencil, coin, deep dish to fill with water, crayon

Procedure: Divide tagboard into three columns. Across the top write: "Will it sink or float?" Draw pictures of items listed under materials and write their names next to them. Cover with clear contact.

Evaluation: The child will:

1. Predict if item will sink or float.
2. Place item in water and observe what happens.
3. Chart the appropriate place on the chart using a crayon so the recordings can be erased.

Title: Steam -- Changing a liquid into a gas

Objective:

1. The child will produce steam.
2. The child will demonstrate that steam causes a pinwheel to move.
3. The child will construct a pinwheel.

Materials: 5" square of paper, straight pen, dowel, kettle of boiling water, hot plate

Procedure: Bring water to a boil. Make pinwheel by drawing the lines for the children to cut on. Tell them which corners to fold to the center by the numbers placed on each corner. Push a pin through the center of the dot and into the stick. Hold the pinwheel before the steam escaping from the kettle. Explain how the escaping steam causes the pinwheel to move.

Evaluation: The child will:

1. Follow steps to complete pinwheel.
2. Verbally explain what happens to a pinwheel when held in front of steam from kettle.

Title: Flowing Water

Objective: The child will construct a working water wheel.

Materials: 2 pieces of wood (1" x 1" x 16") for uprights, 2 4D nails, 4 pieces of wood (1/4" x 3" x 4") for spokes, several 1" common nails, 1 piece wood (1" x 1" x 4") for hub, hose attached to faucet

Procedure: Nail one 4D nail halfway in each end of hub; nail (with 1" nails) the spokes to the hub in swastika fashion. Cut a notch in end of each upright and point the other ends. Drive them into the ground. Lay wheel across notches. Run water from hose over the wheel. Explain how the water pressure causes the wheel to move.

Evaluation:

1. Successfully assist in the building of a water wheel.
2. Verbally explain what is supposed to happen.
3. Correctly arrange in sequence pictures of what was done.

Title: Soil Holds Water

Objective: The child will demonstrate that various types of soil hold different amounts of moisture.

Materials: 4 small tin cans, 4 large tin cans, cheesecloth, samples of sand, clay, humus, measuring cup

Procedure: Cut the tops and bottoms from 4 small cans. Tie a double thickness of cheesecloth over the bottom of each can. Put one sample of soil in each of three cans (about 2/3 full). Put a mixture of equal parts of sand, clay, and humus in the fourth can. Cut the tops from the large cans. Hold each small can over a large can. Pour equal amounts of water over each soil sample. Discuss the results with the class.

Evaluation: The child will:

1. Measure and record the amount of water that filters through each soil sample after 5, 10, and 20 minutes.
2. Answer question: "Which one did it filter through first?".

Title: Evaporation

Objective: The child will measure and record change in the amount of water during the evaporation process.

The child will demonstrate an understanding of the concept of evaporation.

Materials: 2 clear plastic glasses, marking pens, 2 flat dishes, salt, water

Procedure: Place the same amount of water into identical, clear, plastic glasses. Mark the water level on exterior of glasses. Cover 1 glass. Fill 2 glass dishes with only water in one and a mixture of salt and water in the other. Discuss the reasons for a decrease in the water level.

Evaluation: The child will:

1. Observe changes day by day and mark the glasses.
2. Discuss the reason for and definition of the residue left in the pans.
3. Taste residue left in pan and describe it.

Title: Erosion

Objective: The child will demonstrate:
(1) how water will wash away soil.
(2) how plants can hold the soil.

Materials: 2 wooden fruit boxes, burlap, rich soil, grass soil, large pan, sprinkler -- water, 2 glass jars, sand, small rocks, water

Procedure: Cover the sides and bottom of each box with burlap. Fill both with soil (to ½" of top). Plant grass in one box, nothing in the other. Place both boxes in a sunny place. Water both boxes when the grass needs water. When the grass is about 2" high, raise and prop one end of the box about 1" above the table. Sprinkle from about 6" above the grass (use water as rapidly as it can flow through the can) Water and soil will flow into the pan. Pour run off into a jar. Repeat the process with the other box. Let contents settle. Discuss the erosion process and what can be done to decrease soil erosion.

Evaluation: The child will:
1. Observe boxes to see which has more ditches.
2. Compare the contents of the two jars.
3. Answer question: "From which box did more soil wash away?".
4. Take a field trip after a rain to observe erosion around the school area.

Title: Water Conservation

Objective: The child will demonstrate water conservation practices.

Procedure: Place a bucket or pitcher under a dripping faucet or at the end of a dripping hose. Measure the amount of water collected in one morning. Use the water to water class plants or to mix paint for art activities. Put an illustration of children turning the faucet off over wash basin.

Materials: Pitcher or bucket, measuring cup, pictures of faucets and/or hose

Evaluation:
1. Let the children draw pictures of ways they can save water.
2. Ask the class to make up rules for wise use of water.
3. Let children cut out pictures to put on posters to remind people to use water wisely.

Title: Making Rain

Objective: The child will be able to demonstrate that cold air changes humidity into water or raindrops.

Materials: Water, hot plate, kettle, saucepan, ice, long handle pan, hotpat, potholder, measuring cup.

Procedure: Boil a kettle of water and fill saucepan with ice (use a long handle pan). Hold the pan about 4 inches from the spout, tilting it so the ice doesn't spill. Discuss with the children how almost immediately the chilled pot will change the steam back into drops of water - the way cold air changes a cloud of humidity into raindrops. The raindrops can be measured if the child puts a cup under the saucepan.

Evaluation: The child will be able to arrange sequence cards to demonstrate the procedure followed and verbally explain the concept developed.

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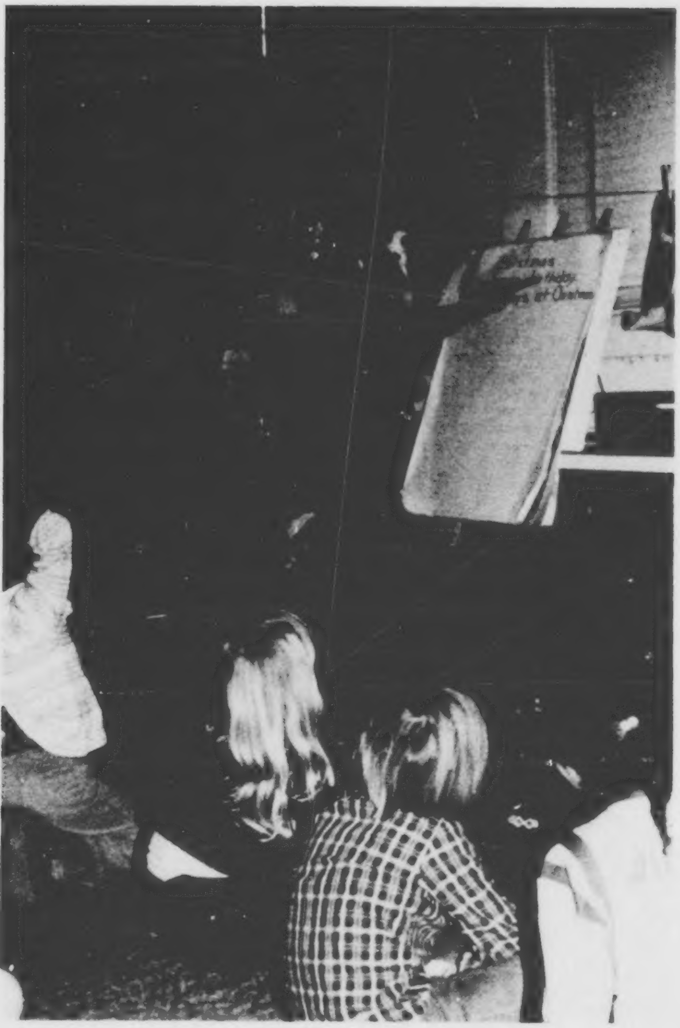
Language Arts



RATIONALE

Good communication skills are basic to all education. The ability to communicate is dependent on the acquisition of the following skills: listening, oral language, reading and writing.

Language development is crucial from birth to six years of age. Speaking, listening, reading, and writing are all a part of language development. Listening is called aural language and speaking is called oral. Both precede reading and writing. The kindergarten teacher's purpose is to give children extensive practice in listening and speaking. This provides the background for later writing and reading. Concepts learned orally and aurally also serve as a frame of reference for reading and writing. Reading and writing can be difficult for children if oral and aural language experiences are inadequate or lacking.

CONCEPT LEARNING

Listening skills can be divided into three main categories: auditory awareness, auditory discrimination, and auditory sequencing and memory. Auditory awareness is concerned with the simple recognition of the presence of sound. Auditory discrimination requires the ability to distinguish between sounds and to group them into categories such as fast-slow, loud-soft, or high-low. Auditory sequencing deals with the ability to reproduce a sequence of sounds in the correct order and therefore requires auditory memory as well.

Listening skills must be taught. A nontraditional, but extremely effective method of teaching listening skills is a music-based program which utilizes recorded orchestral or instrumental music. A music-based program is based on two major tenants of teaching: (1) centralization of the student's attention, and (2) immediate involvement. Every effort is made to indicate to the students on which part of the music the teacher wishes them to focus their attention. Then immediate, active involvement of the students in response to the music is essential. In most cases, this involvement means dramatic movement that correlates with the music. These movements should enhance the interpretation of the music. Many other basic concepts of teaching are also included in this program.

1. Each experience must fit the frame of reference of the children.
2. Care must be taken to utilize selections that are within the attention span of the students. It is usually better to begin with shorter selections and gradually increase the duration of the musical pieces.
3. Care must be taken to "break it down" into small segments.
4. The teacher must focus on just one thing at a time.
5. Provisions must be made for the "R and R" of learning--repetition and reinforcement.

Oral language should be fostered by the kindergarten teacher in the following ways:

1. Teacher establishes a comfortable relaxed atmosphere that stimulates the children to talk freely.

2. Teacher values each child and schedules time for children to talk. The teacher should serve as a model for the child's speech.

3. Teacher gives clear directions.

4. The teacher who hears incorrect pronunciation and grammar allows the child to finish the statement, believing that incorrect speech is preferable to no speech. The teacher may then, or later, use the specific words correctly to help the child begin to hear the correct form.

5. The teacher uses open-ended questions that encourage the children to elaborate on their ideas, information, and feelings.

6. The teacher watches for children who do not speak, who do not respond to directions until the others start. These symptoms suggest the need for medical referrals, hearing, and speech assessment.

7. The teacher writes down stories, songs, poems, and sayings a child expresses and reads them back to the child, showing that language is valued and teaching that there is a relationship between spoken word and written words.

Pre-reading and reading skills include the following elements:

1. Language development

2. Visual discrimination - skills in distinguishing printed forms and the figure from the background.

3. Auditory discrimination - skills in distinguishing variation in sounds from gross to subtle differences.

4. Directionality - ability to track with the eye from left to right and top to bottom.

5. Eye-hand coordination - skills are required to perceive and reproduce letters and words.

6. Cognitive development - skills of sorting, classification, and generalization applied to languge sounds, word shapes, and meanings.

7. Symbolic thinking - giving meaning to pictured objects and events and interpreting feelings.

8. Sequencing - identify and understand the order of actions and events in sequences and time frames.

Writing skills demand fine motor skills as well as eye-hand coordination. Any activities which promote these skills, such as coloring, painting, cutting, and manipulatives will make learning to write easier. The teacher should integrate the actual forming of letters into many varied activities. This can be done only after the basic skill has been learned. For instance, begin to form clay letters only after the clay has been introduced and is a familiar activity.

INSTRUCTIONAL TECHNIQUES

Language arts activities should always meet the needs of the students. Activities must be broken down in steps to facilitate learning and to match the developmental level of the child. An "integrated approach" provides multiple learning opportunities for all concepts. For example, if the class is studying birds, the listening skills, oral language, pre-reading skills, and pre-writing skills activities should all be related to birds, if possible. Repetition and reinforcement using different activities, interpretations, and focus provide for a strong base of learning. Creativity is the key!

GENERAL MATERIALS

Record Player
Rhythm Instruments (Utilize homemade and commercially bought ones.)
Tape Recorder
Construction Paper and Assortment of Art Papers
Pencils, Crayons
Scissors
Glue and Paste
Old Magazines and Newspapers
Selection of Children's Books (Check out from local or school library if necessary.)
Old Typewriter
Balance Beam
Lauri Crepe Foam Rubber and Lower Case Alphabet Pieces
Manila File Folders (legal size)
Unit Blocks
PVC Pipe and Fittings
Tempera Paint
Easel and Paint Brushes and Paint Shirts
Play Dough
Large and Small Beads and Strings
Pegs and Pegboards
Fabric Scraps
Pipe Cleaners
Variety of Classical Music Recordings (See list in the activity section.)
Flannel Board

Refer to the equipment and materials section in this resource book for a synopsis of commercial materials in the language arts area available for examination at the office of the Early Childhood Coordinator at the State Department of Education.

ACTIVITIES TO DEVELOP LISTENING SKILLS

Auditory Awareness

Title: When Did the Sound Stop?

Objective: After hearing an instrument played, the child will raise his/her hand when he/she can no longer hear the sound

Materials: Any instrument with a ringing sound, such as large cymbal, triangle or gong.

Procedure: The teacher plays the instrument and children listen. Children put up their hands when they can no longer hear the sound. The challenge here is that they must realize that the sound continues after the playing has stopped. Let children take turns playing the instrument.

Evaluation: Teacher observation of child raising hands recorded on checklist.

Title: Locate the Sound

Objective: Child will locate a hidden ticking metronome in the room.

Materials: Metronome or loud kitchen timer, student checklist.

Procedure: Children cover eyes and teacher or child hides the ticking metronome. One child is selected to find the metronome. Variation: The child selected to find the metronome first states if it is believed to be nearby or far away.

Evaluation: Teacher observation of child locating the object recorded on checklist.

Title: Statues

Objective: Student will move while the record is playing and stop immediately each time the record stops.

Materials: Record player, record of music with no words ("Movin'" by Hap Palmer is excellent.)

Procedure: Teacher starts the music. Children respond to the music anyway they choose within their own space. When the music stops, (without warning) the children freeze into a statue. Notice the various poses. Music starts again. Vary rhythms of music.

Evaluation: Teacher observation of child's motion recorded on checklist.

Title: Musical Simon Says

Objective: After hearing the spoken command, the child will follow the command only when he/she hears the specified note played.

Materials: An instrument for playing various pitches, such as piano, xylophone, or pitch pipe.

Procedure: This game is like Simon Says. Instead of moving to a spoken command ("Simon Says do this."), children move only when they hear a certain note played on an instrument. Give instructions along with the note to "Touch your knees." The children do the action only when they hear the note--no note, no action.

Variation: Assign one note (example, middle C) to be the command to do the action. Give other instructions and play other "wrong" notes, but action should be done only when middle C is heard. At first choose one "wrong" note, many tones away from middle C. Gradually, as the game is learned, move the "wrong" note closer to the key one. The closer the notes, the harder the game.

Evaluation: Teacher observation of child's movements recorded on checklist.

Title: Listening to Foods We Eat

Objective: After testing four foods, the child will compare the sounds the food made.

Materials: Foods, such as celery, banana, popcorn, crackers, bread.

Procedure: Make a tasting tray of four kinds of food. Children taste the food then verbally compare the sounds of the food. Example: celery--crunchy, snap, loud; banana--soft, mushy

Evaluation: Teacher observation of child's verbal response.

Title: Rhythmic Names

Objective: The child will clap out the rhythm pattern of his/her first name.

Materials: Your hands or a tamborine.

Procedure: Children sit in a circle. Each child says his/her first name then claps the rhythm of his/her first name. After each child can do this, then add the second name.

Variation: When each child can clap the rhythm, they can snap fingers or stand up and march to the same rhythm.

Evaluation: Teacher observation of child's verbalization.

Title: Rhythm Instruments

Objective: Child will shake a rhythm instrument on command from the teacher.

Materials: Rhythm instruments such as sticks, rocks, wood blocks, shakers, bells, chums (or coffee cans), triangle--use your imagination!

Procedure: Introduce one rhythm instrument at a time and show the proper way to use it. Let each child choose one to play. When the teacher raises her hand, children can play. When the hand goes down, children stop playing.
Variation: Add music of different rhythms to play along with. Play soft and loud.

Evaluation: Teacher observation of child's responses as recorded on a checklist.

Auditory Awareness/Discrimination

Title: Sound Tray

Objective: Child will manipulate the items on the sound tray and verbally describe the sound.

Materials: Objects to make sounds such as bell, feather, comb, sea shell, triangle and striker, alarm clock, shaker, eggbeater, cowbell, paper, tissue, cotton ball.

Procedure: Let children explore and manipulate the items describing the sounds such as loud, soft, shrill, sharp, rackety, smooth, etc. Encourage children to compare the sounds of different items.

Evaluation: Teacher observation of verbal response.

Auditory Discrimination

Title: Matching Sound

Objective: Child will match the cans with the same sound.

Materials: Empty 35mm film cans or empty baby wipe containers or empty plastic paint containers or any cans which can be closed securely and are all alike. Place in the container various substances such as salt, pennies, gravel, golf tees, beans, etc.

Procedure: Teacher will make pairs of cans with matching sounds. Make sure the lid is on securely. Child will shake the cans and find the two with the same sound. Put a sign that reads "Can you match the sounds?" with the activity.

Evaluation: Teacher observes the way the child matched the cans and records on checklist.

Title: Put the Sounds in Order from Loud to Soft

Objective: The child will arrange 4 cans in order from loud to soft.

Materials: 4 cans of the same size (35 mm film canisters or turnings, tea canisters or empty plastic paint containers), various substances such as pieces of paper, sugar, beans, and pennies.

Procedure: Teacher will put 4 substances in 4 cans. Make sure the lid is on securely. The child will arrange the cans in order from loud to soft. A chart such as the following should accompany the cans for self-explanation:

LOUD SOFT

If a child is having trouble, start with 2 cans, then add 3, then 4.

Evaluation: Teacher observation of the way the child arranged the cans as recorded on a checklist.

Title: Hot and Cold

Objective: The child will find a hidden object, using the cues of high notes and low notes played by another person.

Materials: An object to hide, a xylophone or piano

Procedure: Variations on the game "Hot and Cold" will teach auditory discrimination of "high" and "low." One child goes out of the room or hides his/her eyes. Another child hides an object in the room. No verbal hints can be given. Instead, a third child plays a xylophone or piano low tones when the seeker is "cold" and high tones as the seeker get closer or "warm" Repeat with different children.
Variation: Play the game using a drum and the concepts of "loud" and "soft."

Evaluation: Teacher observation

Title: What Sound Is It?

Objective: Child will identify 8 out of 10 sounds on the pre-recorded tape.

Materials: Tape recorder, tape of recorded sounds.

Procedure: Record selected sounds on a cassette tape. The sounds should be familiar and heard long enough on the tape so the children can hear them adequately. These activities could be divided into tapes of "Sounds Around the House", "Sounds of Animals", "Outdoor Sounds", "Sounds at School", etc. The child listens to the tape and identifies the sound being made. Suggested sounds include: liquid boiling, food frying, blowing bubbles, peeling potato, doorbell ringing, oven timer buzzing, water running, car starting, windshield wipers, dog barking, telephone, trains, sirens, garbage trucks, dishwasher, etc.

Evaluation: Teacher observation of the child's appropriate identification of sounds as recorded on a checklist.

Title: Guess the Sound

Objective: After a sound is made the child will recall the sound.

Materials: Noise making objects such as ball, ruler, chalk, pencil, eraser, etc.

Procedure: Show the children the objects. Have the children hide their eyes (or teacher can hold up a poster board in front of her) and teacher drops an object. The children guess what was dropped.

Evaluation: Teacher observation of verbal response

Title: Painting to Music

Objective: While hearing a selection from Carnival of Animals, the child with paper and crayons will imitate the movement of the animals described in the music.

Materials: Carnival of Animals by Camille Saint Saens. Record player, paper and crayons or paint.

Procedure: After listening to selections within the record, discuss how each animal moves quickly, slowly, heavily, lightly. Children may imitate the movement. Give each child paper and crayon. Play one selection from Carnival of Animals. Encourage the child to make a picture of the sound and movement i.e.: Kangaroo; Elephant.

Evaluation: Teacher observation

Title: Can You Do the Opposite?

Objective: Child will move in the opposite manner of what he/she hears.

Materials: Record player, record, tamborine.

Procedure: Talk about what "opposite" means with the group. Give examples. Explain that as the music or tamborine is being played, you will do the opposite. Example: slow music or beats--fast movements, fast music or beats--slow movements, loud music or beats--soft movements, soft music or beats--loud movements. Start out with fast and slow beats on the tamborine. As children respond correctly, then you can use recorded music.

Evaluation: Teacher observation of movements

Title: Rhyming Words

Objective: After hearing three words, the child can repeat the two rhyming words.

Materials: None

Procedure: The teacher will say three words, two rhyming and one not, such as cat, hat, dog. The child will tell the two rhyming words.
Variation: Child tells the word that does not rhyme.
Variation: Teacher says one word and the child thinks of a rhyming word.

Evaluation: Teacher observation of verbal response as recorded on a checklist.

Auditory Awareness/Sequencing

Title: Listening Walk

Objective: After going on a three-minute listening walk, the child will verbally recite the sound heard.

Materials: None

Procedure: Invite children to go on a listening walk. They will use only their "listening ears". When first doing this, make it short, then lengthen time as proficiency increases. When the walk is over, children will verbally relate the sounds they heard in the proper sequence. These sounds could be listed on a chart.

Evaluation: Teacher observation of verbal responses.

Auditory Sequencing

Title: Echoes

Objective: After hearing a clapping pattern, the child will echo the pattern.

Materials: Body parts

Procedure: Teacher will clap a number of times in a steady pattern--two, three, four, or five. Start with two counts and have the children echo. Increase the number as the children become proficient. It is easier if the teacher uses the cue--my turn . . . . your turn. Make patterns more difficult as proficiency increases.

Variation: When children can perform the echoes easily by clapping, combine body motions such as patting knees, snapping, touching shoulders, etc.

Variation: Echo using right hand one time and left hand another time. (dominance)

Variation: Play echoes on rhythm instruments.

Variation: Sing the echoes with a neutral vowel such as "loo", "lah" or "dum di dum".

Evaluation: Teacher observation of child's response.

Title: Singing a Sequencing Song

Objective: Child will sing in order the sequencing song.

Materials: Singing voice, guitar or piano

Procedure: Introduce the song by sequences or parts. Pictures of the components of the song can be helpful in the beginning. Examples:

"She'll Be Coming 'Round the Mountain"
"The Twelve Days of Christmas"
"Farmer in the Dell"
"This Old Man"
"Bingo"
"Froggy Went A-Courting!"
"Little Peter Rabbit Had a Fly Upon His Nose"

Evaluation: Teacher observation of verbal response

Auditory Sequencing and Memory

Title: Ball Bouncing

Objective: As a ball is being bounced, the child will correctly count the number of bounces.

Materials: Ball or clap hands

Procedure: Children hide their eyes and teacher bounces a ball (or claps hands) several times. Ask a child, "How many times did the ball bounce (or hand clap)?"

Evaluation Teacher observation of verbal response.

Title: Hearing and Repeating Sound Sequences

Objective: After hearing three sounds, the child will repeat the three sounds heard in the correct order.

Materials: Bell, rattle, sandpaper, paper (to tear), wooden blocks.

Procedure: Talk about objects and the sounds they make. Have children cover their eyes. Make three noises. Children respond by telling what noise was first, second, third.
Variation: Add new objects and increase the number used. Have a child make the sounds with the objects.

Evaluation: Teacher observation of child's response.

Title: Following Directions

Materials: Noise making objects such as bell, rattle, wooden blocks, eggbeater.
Other objects: book, chair, cap, ball

Objective: After listening to directions, the child will manipulate the objects in the specified order.

Procedure: Talk about the objects and the sounds they make. Ask children to listen carefully and then tell them what to do. Example: ring the bell, hit the blocks together. Then ask who wants to do it and choose a child. Start with two directions, then give three tasks.
Variations: Teacher can move around the room and touch three or four objects. Then ask who can remember what was touched. When children are outside, give directions such as, take two big steps, hop, turn around, etc.

Evaluation: Teacher observation of child's response as recorded on a checklist.

Auditory Discrimination and Sequencing

Title: Classical Music Listening Experience

Objective: After listening to "The Elephant", "Kangaroo", and "Aquarium", the child will do the three motions assigned to the three pieces.

Materials: Record player, recording of a piece of music such as Donaldson, Under the Big Top
"Acrobats, Marching Band, Juggler, Merry-Go-Round, Elephants, Clowns, Camels, Pony Trot, Tight Rope Walker"

Donaldson, Once Upon a Time Suite
"Children Little, Three Billy Goats Gruff, Little Train, Hare and the Tortoise"

Rimski-Korsakov, Flight of the Bumblebee

Copland, "Hoe-Down" from Rodeo

Grieg, Peer Gynt Suit "Morning in the Hall of the Mountain King"

Grofe, Grand Canyon Suite "Sunrise, Sunset, On the Trail, Cloudburst"

Holst, "Mercury" from The Planets

Saint-Saens Danse Macabre
Carnival of Animals

Prokofiev, Peter and the Wolf

Tchaikovsky, The Nutcracker Suite

Britton, The Young Persons Guide to the Orchestra

Dukas, The Sorcerer Apprentice

Procedure: See lesson plan on following page.

Evaluation: Teacher observation

EXAMPLE OF LESSON PLAN

I. Type of Experience: Listening Experience

II. Level: Kindergarten

III. Music and Source: Animals and Circus. Bowmar Orchestral Library (BOL no. 51), Lucille Wood, ed. (LP 1395, v. 1, c. 3) Pieces from Carnival of Animals by C. Saint-Saens, "The Elephant", "Kangaroo", and "Aquarium".

IV. Correlation: Health Unit

V. Materials: record; record player; cut outs of soap, comb, toothbrush; crayons

VI. Mini-Unit (Example of teacher instruction/dialogue is found below.)

A. Boys and girls, since we have been thinking about good health habits, what are some things you should do every day for your good health? (If someone does not give my particular responses, tell them about brushing their teeth, washing and combing their hair and taking a bath.)

B. Why should we brush our teeth at least 2 times a day? (To prevent cavities). Teeth should last a lifetime, etc. If the children do not give the proper response, explain to them about cavities and proper dental care. Explain to the children that they will get cavities if they do not brush at least 2 times a day to keep their teeth clean and to prevent bacteria that cause cavities.

When brushing our teeth, we should always remember:
to brush thoroughly,
but not too rough.
Review what we should know about brushing our teeth. Illustrate the correct way to brush our teeth by using a mirror and demonstrate on myself in front of the children who are working in small groups.

C. Why should we wash and comb our hair? (to be neat and clean) If the children do not answer or give the correct response, tell them about being neat and clean. The full length mirror in the classroom should be used as children practice combing their hair. What should we remember when washing and combing our hair?
Be careful not to get soap or shampoo in your eyes.
Be sure to wash and rinse thoroughly.
Be careful not to pull your hair when combing it.
Review: What should we know about washing and combing our hair? (neat and clean; don't pull; watch the soap)

D. Why should we take a bath every day? (to stay clean) If the children do not give the proper response, tell them why it is important to wash daily.

What should we remember when taking a bath?
Be careful with the soap and water.
Be careful when you must stand up in the tub.
Review: What should we remember when taking a bath? (to keep clean, be careful standing)

As a part of this segment on good health set up the dramatic play area to allow the children the bathe the dolls, using soap and water.

VII. Art Experience
Construction of Toothbrush/Bathing Checklist

A. Introduction: Since we have been talking about health habits, we are now going to make a checklist to help us keep our good health habits.

B. Instructions for working
1. Define and discuss the concept of a checklist.
2. Explain that the checklist forms being passed out will be sent home by each child to help each one remember to brush and bathe.

C. Give the children their materials--lined paper in checklist form, crayons, paste, scissors, construction paper.

D. Instructions while working
Instruct the children to draw and/or cut from construction paper a tub and toothbrush. Patterns for each may be made available, but not required to be used by the children. They may paste the pictures at the bottom or top of their checklist and write their name on the checklist for identification purposes.

E. Let the children work for a given amount of time.
1. If the children are not finished at the end of this time, tell them they may finish later.
2. Encourage the children to display their checklists at home and after one week return them to school to compare.

VIII. Teaching of Musical Experience
A. Introduction
1. Now that we have talked about good health habits and made our good health checklist we are going to listen to several pieces of music that sound like children using toothbrushes, combs and soap.
2. The music is called an instrumental because it does not have any words and you can hear the instruments. You listen rather than sing. Music that has words is called a song.
3. Paper toothbrushes, soap, and combs should be used with the activity. Children can make these during an art or free period.

B. Program Listening
1. In this first musical piece, we may hear sounds like we are brushing our teeth because the music is fast.

2. As I play the record, listen and watch me.
3. Listen to the first part. I will brush my teeth with my right hand. Then when the first part (the theme) is played again I will switch hands. The middle section sounds different. On this part I will gargle.* After the middle section, the first part will play again and I will brush my teeth again switching hands.

   Play "Elephants", pointing out each section by doing appropriate movements.

C. Explain Movements

This time when I play the music, boys and girls, I would like for you to use your paper toothbrush and pretend you are brushing your teeth, switching hands. Remember to pretend to gargle (silently) on the middle section.

(Play piece and cue movements visually and with oral cues.)

D. Program Listening

1. In the second piece, I think it sounds like we are combing our hair. The music sounds like a comb being pulled through our hair because the notes of the music are short. On the different part, it sounds to me as if we are smoothing and straightening our hair because the music is smoother.
2. As I play the record, listen. Does it sound that way to you?

   I will play "Kangaroo" and act as though I'm combing my hair. On the part that sounds different I will straighten and smooth my hair.

E. Explain Movements

This time when I play the music, I would like for you to use your paper comb and pretend you are combing your hair. Then, on the part that sounds different, smooth and straighten your hair.

(I will play the piece and cue in movements visually and with oral cues.)

F. Program Listening

1. In this piece, I think it sounds like we are taking a bath. The music reminds me of splashing water and using soap in the bath.
2. As I play the record listen, does it sound like we are taking a bath? I will play the first part of the record and act as though I am taking a bath. I will start with my right hand and when this part (the theme) plays again I will switch hands. On the part that sounds different, we will act as though we are wringing out our bath cloth.

---

*Define term "gargle".

At the very end, there is another different part that to me sounds like we have pulled the plug to let the water out of the tub.

(I will play the record and demonstrate for the children.)

G. Explain Movements

This time when I play the music, I would like for you to use your bar of soap and pretend you are taking a bath. Watch me and listen carefully so you will know when to switch hands. Also remember to wring out your bath cloth and to pull the plug.

(I will play the piece and cue in the parts visually and with oral cues.)

H. All Movements

Now, we are going to listen to all three pieces again and do our motions. Remember we brush our teeth, then comb our hair, and then take a bath.

(Play the pieces and cue the children on each piece whether to use the toothbrush, comb, or soap.)

I. Reinforcement Activity

Divide the class into 3 groups. One group will be toothbrushes, another combs, and the other bars of soap. Tell them to watch so they'll know when their piece comes in. They do only the movements to their assigned piece.

(I will then play the music again and cue the children for their part.)

J. Tell them the real title of these pieces are "The Elephant", "Kangaroo" and "Aquarium" from a work called the Carnival of Animals, but they sounded like daily grooming habits.

IX. Immediate Transition

We have now listened to music that sounds like some good health habits. Who can think of some more good health habits? (eating correctly, exercise, seeing the doctor).

X. Suggestions for further use

A. Other units
   1. Zoo animals
   2. Fish

B. Other musical selections
   1. "The Snow is Dancing"
      "Serenade of the Doll"
      Children's Corner Suite
   2. "Sick Doll"
      "New Doll"
      Album for the Young

C. Other Ideas
  1. Identify different instruments
  2. Other good health habits

Biographical Sketch
SAINT - SAENS, CAMILLE 1835 - 1951

He was a French composer, born in Paris. Saint-Saens was a very musical child. At seven, he studied the piano and harmony. Some of his acclaimed works are Danse Macabre, Le Rouet d'Omphale and Samson and Dalila- an opera.

During his life Saint-Saens combined great musical productivity with much travel. He visited Algeria, South America and the U.S. When Saint-Saens died, a national day of mourning was declared.

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ACTIVITIES FOR VOCABULARY DEVELOPMENT

Title: Feely Can

Objective: A blindfolded child will verbally identify an object pulled out of a can.

Materials: One tube sock, coffee can; objects with many shapes and textures; blindfold (optional).

Procedure: Fill coffee can with objects. Stretch sock over the coffee can. Put blindfold around a child's head. Have the child describe the object, as well as guess what he is feeling, then pull out the object to see what it is.
Variation: Design blindfold sensory activities for outside, also. Have sensory blindfold guessing games.

Evaluation: Observation of task; verbal or manipulative response to questions.

Title: Mr. Applehead

Objective: The "receiver child" will arrange Mr. Applehead the way the "sender child" verbally commands.

Materials: Two large apples, (cut from construction paper), cut various features, etc.

Procedure: Cut two large apples from construction paper. Cut various features (two sets of features for the apples). Two children sit facing each other with a screen (poster board) between them or else back to back. Each child should have an apple and a complete set of features. One child is the sender and the other child is the receiver. The sender tells the receiver what features to put where as she/he duplicates the directions on his/her Mr. Applehead. After he or she is through, the children check to see if the apppleheads look the same. Can use real apples and food.

Evaluation: Observation of task

Title: Friendship Day

Objective: After all children are given a shape, the child will find another child in the class with the matching shape.

Materials: Two sets of animals or shapes to match with another person.

Procedure: Give the children animals or shapes to match with another person. When they find their matching person, they are given the chance to sit quietly together, talk to each other about anything they want, and plan to do something together that day, such as eat snacks together, draw a picture together, play a game together, do a puzzle together, etc. Later in the day, give them some free time to do their "together" thing. Do this frequently and give the children a chance to have quiet talks with different people on Friendship Day.

Evaluation: Teacher observation.

Title: Draw a circle

Objective: Given a piece of paper with a line drawn across the center, the child will draw a circle above the line.

Materials: Paper; pencils, crayon; etc.

Procedure: Draw a line across the center of a number of sheets of paper; distribute these. Take turns with the children, giving directions like: Draw a circle above the line. Print a red "A" under the line, etc. Increase the complexity of the directions as the children's interest and proficiency warrant.

Evaluation: Teacher observation of task; teacher-made checklist.

Title: What's the Title?

Objective: After cutting out a picture and mounting it, the child verbally assigns a name to the picture.

Materials: Magazines; scissors; glue; paper; marker.

Procedure: Let each child find a picture in a magazine that he/she likes. Mount it attractively after the child has cut it out. Let each child give his/her picture a title. The teacher writes the title on the paper. Children present their titled pictures to the class.

Evaluation: Teacher observation of task; verbal/manipulative responses to questions.

Title: Fact or Fantasy

Objective: The child will make a book of fact or fantasy questions.

Materials: Resource materials.

Procedure: Ask the children to predict the answers to questions such as; "Does a centipede have 100 legs? Are bald eagles really bald? Can a porcupine throw its quills?" Have the children ask their questions. The teacher writes down the answers (guesses) on a chart. Help the children locate the answers. Make a collection of fact or fantasy questions for a book that can be illustrated with fact or fantasy illustrations made by the students.

Evaluation: Teacher observation of task; teacher-made checklist; verbal responses to questions.

Title: What Doesn't Belong?

Objective: Given three pictures, the child will choose by pointing to the picture that does not belong in the group.

Materials: Magazines; scissors.

Procedure: Have the children cut an assortment of pictures from magazines. After they have a large collection, the teacher should sort the pictues according to similarities and differences. For example, if several pictures (three) have trees in the background and one doesn't, have the children choose the one that is different. Good for two or three children. Can be made into a folder game.

Evaluation: Teacher observation of task; verbal responses to questions

Language Arts: Oral Vocabulary

Title: Masks for Me

Objective: Wearing a hand-made mask, the child will tell a story.

Materials: Paper sack; scissors; paste; crayons; colored paper; yarn; etc.

Procedure: Let each child make a mask out of the paper sack and the materials listed above. Cut holes for eyes, nose, and mouth. Wear the mask to tell an original story, to tell a story he/she has heard, or just for fun! Each child also changes his/her voice to fit the character he/she plays.

Evaluation: Teacher observation of task; teacher-made checklist.

Title: Celebrations in the Classroom

Objective: The child who is a "special person for the day" verbally tells a story about his or her family.

Materials: Resource materials.

Procedure: Begin with the familiar. Plan (with children) special programs and events to help celebrate the holidays. Have the children share their ideas and feelings about the events. Do not limit your special events to just those expected times. Your room is your world and in that world you and your students can celebrate many original happenings that stimulate all the language skills, but most especially, oral language. The teacher can also allow one day of the week to be a Special Person Day. A child's name is picked out of the Special Person Sack. A letter goes home to the family telling that he/she will be a special person a specific day and any anecdote, story, or item that his/her family will share about him/her would be very welcome. The child brings special things to share with the class. The children talk about why this person is special. The teacher is the special person on the last day of the year. Also another topic for a celebration would be a Color Day. The children will draw orange, speak orange, wear orange, move orange, etc. They begin with concrete, realistic images of the color and move toward more abstract feelings. Also: Animal Days; Favorite Book Days; Unbirthday Party; etc.

Evaluation: Teacher observation of task; teacher-made checklist.

Title: Pet Place

Objective: Child will verbally compose a 3-sentence poem about the class pet.

Materials: Children's pets and room preparation needed in order to accommodate pets.

Procedure: Children care for, study, watch, play with, and discuss their pets with classmates. Pets provide material for all kinds of projects, such as the following: Draw pictures of them; make-up songs, stories, or poems about them; keep daily logs about them; write observations about them; improvise movement based on their movements; talk about them. You may find children who don't talk to other children talking quietly to a pet!

Evaluation: Teacher observation of task; teacher-made checklist.

Language Arts/Oral Vocabulary

Title: Wonder Times

Objective: The child will verbally ask a "wonder question."

Materials: Students.

Procedure: Wonder times are quiet times when no answers are necessary. Everyone has a turn to wonder out loud about something. The children may comment on or add to a question, but it is not required. Often, teachers discover topics of vital concern to the children, and then can guide further exploration and discovery.

Evaluation: Teacher observation of task, teacher-made checklist.

Title: "It Went Like This" Story

Objective: After hearing a story, the child will retell the story in the proper sequence.

Materials: White paper; scissors; tape.

Procedure: Make up a story with the following plot: children pick up handfuls of snow to form snowballs. They place the balls on top of each other from largest to smallest to form a snowman, with eyes, nose, mouth, etc., formed with circles (also may add buttons). Tell the story and tape snowballs together. Mix them up and tape snowballs together. Mix them up and have children determine left-to-right order retelling the story as the snowman is put together.

Evaluation: Teacher observation.

Title: "Reading" Picture Books

Objective: Given a picture book, the child will verbally "read" the story.

Materials: A picture book(s) that contains no words.

Procedure: Working with a small group, the teacher "reads" a picture book that contains no words. Give a child the opportunity to "read" the same book or a different one to the group. Also, the children can make picture books to "read" to the class.

Evaluation: Teacher observation of task. Picture books without words:

Alexandra, Martha. Bobo's Dream. New York: Dial Press, 1970.

Amos, Berthe. By the Sea. New York: Parents' Magazine Press, 1969.

Goodall, John S. The Adventures of Paddy Pork. New York: Harcourt, Brace, and World, 1968.

Revius, Jacobus. Noah's Ark. New York: Doubleday and Company, 1977. (Illustrated by Peter Spier)

Evaluation: Teacher observation of task.

Title: Rhythmic Clapping

Objective: The child will verbally respond by filling in the blank in a rhythmic clapping activity.

Materials: Students.

Procedure: Teach the children the following pattern: clap, clap, pause; clap, clap, pause. With each clap say a word and indicate that the child is to fill in the pause with a word. For example:

Clap, clap, pause
" I like ____." (child supplies word)

Spend enough time establishing the rhythm so the exercise becomes an easy game for the children.

Evaluation: Teacher observation of task.

Title: Expressing Feelings

Objective: Given a picture, the child will verbally describe the picture.

Materials: Pictures from magazines or other sources mounted on heavy tagboard. Pictures should depict individuals in emotional states such as: man crying, person looking sad, child who is hurt, woman looking exasperated, other dramatic facial expressions (Use very old, as well as, very young faces.).

Procedure: 1. Hold pictures up one at at time for children to see, or if working with an individual child, let him/her hold it and examine it closely.

2. Say: "Tell me about this picture." (Many first responses will be simple identification. Let all children have plenty of opportunity to comment.) The teacher needs to be aware of, respond to, and encourage the children's individual expression of feeling.

Evaluation: Teacher observation of task.

Title: Dramatic Play Centers

Objectives: Given the props in a dramatic play center, the child will choose a role and verbally respond in the role.

Materials: The type(s) of dramatic play center(s) a teacher wants in her room will determine what materials will be needed. Send letters home asking parents to save any items that can be used in the dramatic play center(s).

Procedure: Organization is the key to an effective dramatic play center. The dramatic play center should be changed every 2 or 3 days. The different parts of the center should be labeled and a teacher or assistant must be close by to explain how grown-ups do certain things. When props are combined with time to play and experiences to draw from, the value of the activity is immeasurable. Some ideas for dramatic play centers are listed below:
Grocery Store, McDonald's, Post Office, Fire Station, Police

Station, Shoe Shop, Housekeeping, Beauty Parlor, and Barber Shop, Doctor's Office, Cleaning Set, Ranch, Airplane Trip, Office, Department Store, Jungle, etc.

Evaluation: Teacher observation of task, teacher-made checklist.

Title: Puppets

Objectives: Given a puppet, the child will verbally tell a story using the puppet.

Materials: Paperbag, handpuppets, sock or old mitten puppets, shadow puppets, pipe cleaner puppets, stick puppets, fist puppets, glove puppets, peanut shell puppets, broomstick puppets, etc. A puppet stage would be helpful made out of a large box.

Procedure: Children who are reluctant to talk to anyone often feel more confident talking through the characters of puppets. Puppets provide children with many opportunities to enrich and expand their language skills as well as challenging their imaginations. Puppets can be used to explain or describe something, give directions, say funny things, tell stories, ask questions, and create dramatic situations to which children respond.

Evaluation: Teacher observation of task.

Title: Nose Knows

Objectives: After smelling the jar, the child will verbally describe the smell.

Materials: At least 5 baby food jars with holes poked in the jar lids, materials to cover them, yarn, 5 scents to put in each jar.

Procedure: Place different smells in the jars. Put materials around each jar. Let the children smell each jar and describe what they smell.

Evaluation: Teacher observation of task.

Title: Fingerplays

Objective: Child will verbally say or act-out fingerplay with the teacher.

Materials: Puppets or other objects can be used in saying the fingerplay. A teacher should have a good selection of fingerplays to use daily. The children can help the teacher make up a fingerplay about anything.

Procedure: The teacher says the fingerplay and demonstrates the motions several times, then lets the children join in with the fingerplay. The teacher should only teach the children a couple of lines at a time and add to the fingerplay until each child is able to repeat it correctly. Fingerplays make learning fun for a child and is the best way to help expand a child's vocabulary. Fingerplay books:

Scott, Louise Binder, and J. J. Thompson. Rhymes for Fingers and Flannelboards. St. Louis: Webster Division, McGraw-Hill, 1960.

Ellis, May Jackson. Fingerplay Approach to Dramatization. Minneapolis: T. S. Denison, 1960.

Fingerplay Example:
Fingerplay For A Unit On Your State
By: Margaret Cantrell

"To know about our state are five important things. (Hold up 5 fingers.)
Magnolia is our state tree. (Make tree with arms.)
Our bird is when the Mockingbird sings. (Arms fly like a bird.)
Our flower the Magnolia is especially neat to see. (Make glasses.)
Our capitol, Jackson, is a governor's place to be.
Now you've named four. (Hold up 4 fingers.)
There is one more to go. (Hold up 1 finger.)
Of course, Mississippi's children are the most precious you know. (Children hug themselves turning from side to side.)"

Other fingerplays are listed in the Social Studies and Classroom Management sections of this handbook.

Evaluation: Teacher Observation

Title: Talk Written Down

Objective: Child will verbally say one sentence to be included in the story.

Materials: Chalkboard or lined chart paper.

Procedure: The teacher and children decide together what should be recorded. The children dictate experiences, ideas, or stories to the teacher as she records them on the chalkboard or on lined paper.
Variation: The teacher can also use tape recorders to let children record their ideas during the day. At the end of the day, the teacher plays the tape to the class in order to share everyone's ideas. Good teachers of young children provide the opportunity and environment for children to express themselves. This is especially good after field trips.

Evaluation: Teacher observation of task, teacher-made checklist.

Title: Talking Mural

Objective: After making the story mural, the child will verbally respond as a character.

Materials: Large sheet of butcher paper; paints; scissors; string; central character's simple costume.

Procedure: Guide the class in making a mural which portrays all of the minor characters in order, in their natural setting for a simple story. Where the head of each of these characters would normally appear, make a hole in the paper, large enough for the face of a child to poke through. Thus, each character can be made alive by a child who stands behind each picture, places his face in the open circle, and talks as that person or animal. The central character may be costumed very simply and remain in front of the mural where he can move freely to interact and converse with each character in the mural story. Variation: Moving hands, feet, or tools, etc. may also be a part of this living mural. Also, more than one character may remain to be portrayed in front of the mural if necessary. Examples of stories: The Little Red Hen; Three Billy Goats Gruff; The Three Little Pigs; Chicken Little.

Evaluation: Teacher observation of task.

Title: Sharing in the Classroom

Objective: The child will verbally share something with the group once a week.

Materials: One item (or idea) per person to share.

Procedure: Sharing time can range from a 10-minute period to one morning a week with pre-arranged sharers. The person who is sharing tells about his or her subject, shows something if there is something to show, and then is asked questions by the rest of the class.
Variations: Groups of sharers; sharing partners; mystery sharing: With item hidden in a bag or container, class tries to guess while the sharer provides hints; all sharing; teacher sharing.

Evaluation: Verbal/manipulative responses to questions; teacher observation of task; teacher-made checklist.

Checklist for the Individual Child

1. Does the child participate in classroom activities in general?
2. Does the child participate only in some activities and sit out others?
3. Does the child work and play silently?
4. Does the child talk easily to other individuals?

5. Does the child talk easily to the group?
6. Does the child contribute ideas when participating in small group discussions?
7. Does the child express his/her ideas easily? With difficulty? With confidence? With hesitation?
8. What kinds of things does the child talk about most freely?
9. In what kinds of situations does the child talk most comfortably?
10. Is the child responsive when asked questions during discussions? During small group meetings?
11. Are there any areas in the child's oral-language behavior that need extra attention? What?
12. When does the child seem most at ease and happiest?

ACTIVITIES TO DEVELOP READING READINESS

Activity: Peanut Butter Candies

General Objective: To promote oral communication skills.

Specific Objective: The child will talk spontaneously to others, name materials, and use descriptive words while participating in the making of peanut butter candy.

Materials: Pictorial recipe, candy ingredients: honey, peanut butter, non-fat dry milk, wheat germ; tools: mixing bowls, wooden spoons, rubber spatula, measuring cups, wax paper, paper towel, tray for finished product (Recipe is at end of this section.)

Procedure: Place the ingredients on the table and invite the children to make peanut butter candy. Encourage the children to identify the candy ingredients. Place a small amount of each ingredient on a small sheet of wax paper for each child. Allow the children to touch, taste, and smell each ingredient. Question the children as to the touch, taste, and smell of each ingredient encouraging verbal response using descriptive wording. Introduce the pictorial recipe to the children. Have the children describe the procedures needed for the candy preparation by identifying each pictorial direction. Determine the order of actions needed for the candy preparation by reading the recipe with the children in a left-to-right direction. Aid the children in naming tools and equipment as they are used in the preparation process. As the children increase their spontaneous speech, decrease teacher verbal participation. Variation: Candy may be formed into alphabet letters or simple words rather than balls. See Cooking Section of this resource book for other recipes. Experiences such as cooking can be used to teach initial sounds ("P" for Peanut) in a very interesting and exciting way.

Evaluation: Teacher observation

Activity: Maze

General Objective: To develop oral vocabulary and encourage recognition of written words

Specific Objective: While completing the "maze" the child will verbally identify his actions using directional words.

Materials: Printed signs using directional words, equipment for preparing the maze: large cardboard boxes (used for crawling through going into), balance beam (for walking across), tires (for jumping in and out of), benches (for crawling under), steps (for climbing up), slide (for sliding down), and masking or plastic tape.

Procedure: Prepare a maze using the suggested equipment. Provide written instruction for the children through the use of printed signs using directional wording (through, into, across, in, out, under, up, down). Provide additional direction for the children by preparing arrows using masking or plastic tape to indicate the direction of flow. First time through, aid the children in describing their movements by requesting actions using directional terminology. Encourage the children to observe the printed signs using directional wording.

Evaluation: Teacher observation: teacher-made checklist.

Activity: Experience Booklet

General Objective: To expose children to the relationship between the spoken and written word.
To develop the sense of left to right progression of eyes on the page that is necessary in order to read.

Specific Objective: The children will create and compile an experience booklet by organizing photographs of a class experience and providing words or short sentences, to be used as the script.

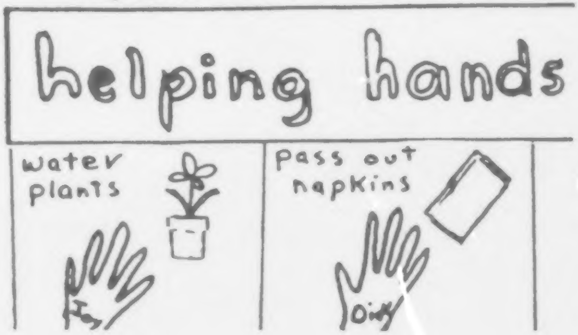
Materials: A series of photographs representing a class experience, paper, pencil, glue, binder for finished product.

Procedure: Provide the children with photographs of a class activity or experience. Display all pictures in a random order. Aid the children in placing the photographs in their proper sequence, while eliciting verbal descriptions for each picture. Invite one child at a time to glue one picture per page. Encourage the child to describe the activity in the picture using one to two words or one short sentence. Record the sentence (or words) on the page. Upon completion of the script place the page in the binder to form a booklet.

Evaluation: Teacher observation/observation of completed task.

Activity: Helping Hands Chart

General Objective: To promote name recognition



Specific Objective: The child will recognize his/her name on the Helping Hands Chart and complete the designated task.

Materials: Bulletin board or large sheet of heavy paper, construction paper, clear contact paper, marker for labeling, pictoral representation of classroom task, glue, scissors.

Procedure: Prepare a "Helping Hands" chart with columns or boxes labeled with various classroom tasks. Illustrate each task with a pictorial representation. Assist each child in preparing a construction paper hand. Label each hand with the name of a child. Cover each hand with clear contact paper to provide durability. As daily or weekly tasks are assigned to a child, attach the child's hand labeled with that child's name in the corresponding position on the chart. Invite one child at a time to find his/her name, giving help as needed. Discuss the designated task with the child and the necessary instructions for completion.

Evaluation: Teacher observation

Activity: The Letter "A"

General Objective: To develop knowledge of the alphabet

Specific Objective: Through song, the child will verbally identify by name the alphabet letter designated by the teacher.

Materials: Two sets of alphabet cards approximately 9" in height.

Procedure: The children sit in a circle. The teacher keeps one set of the alphabet cards and places one set (or a partial set) on the floor in the center of the circle. One child is chosen to stand in the center of the circle. The teacher holds up a letter and everyone sings:

(Tune: "The Muffin Man.")
"Oh, do you know the letter (A),
The letter (A), the letter (A)?
Oh, do you know the letter (A)?
It looks just like this."

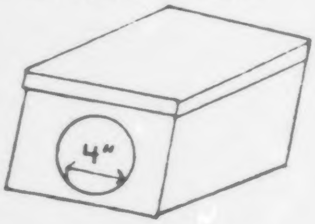
The child in the center picks up the matching letter from the group on the floor in the center of the circle and everyone sings:

"Oh, yes, I know the letter (A)
The letter (A), the letter (A).
Oh, yes, I know the letter (A).
It looks just like this."

The child replaces the letter and returns to his seat. Teacher and children write the letter in the air with one finger and sing:

"Oh, can you write the letter (A)
The letter (A), the letter (A)?
Oh, can you write the letter (A)?
It looks just like this."

Another child is chosen to go to the center of the circle and the song is repeated using another letter.



Evaluation: Teacher observation

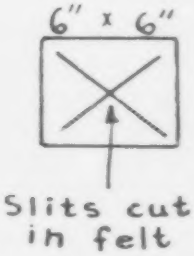
Activity: Feely Box

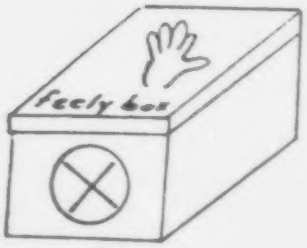
General Objective: To develop physical knowledge of the letters of the alphabet by exploring their shape characteristics

Specific Objective: The child will identify the alphabet letter, using the sense of of touch, before removing it from the "feely box."

Materials: Lauri crepe foam rubber or lower case alphabet pieces, shirt box or shoe box, 6" x 6" square piece of felt, glue, scissors

Procedure: To prepare a "feely box" use a shirt or shoe box with a lid. Cut a 4" diameter hole in one end of the box as illustrated below. Cover the hole with a piece of 6" x 6" felt which has been slit to allow entrance of the child's hand into the box. On the inside of the box glue the felt over the hole. Label the box as shown. Introduce the alphabet pieces to the child allowing physical exploration of the letters being introduced. Ask the child to verbally identify and describe the physical characteristics discovered for each letter based on sensory experiences. Observe the child's discovery procedure and listen to the response. Using the child's response determine the level of knowledge in relation to the alphabet letters and continue appropriate questioning until each letter has been properly identified. Introduce the "feely box" to the child allowing physical exploration of the box. Place 4 to 6 alphabet letters in the "feely box." Have the child reach his/her hand inside the box and retrieve one letter at a time. Before the child removes the letter from the box have him/her name the letter and again describe the physical characteristics.





Evaluation: Observation of task/verbal response of child.

Activity: Print Shop

General Objective: To develop physical knowledge of the letters of the alphabet through visual and tactile experiences

Specific Objective: The children will explore visual and tactile characteristics of the letters of the alphabet through participating in a learning center which provides various art activities replicating alphabet letters.

Materials: Pictures reflecting a printing establishment, samples of printed matter (newspapers, magazines, posters), large scale models of letters, shop-type aprons for protecting clothing, paint, newsprint, models of letters, screens for spatter painting, finger nail brushes to be used for spatter painting, crayons, chalk, pencils.

Procedure: Set up a learning center establishing a print shop environment. Display: pictures reflecting a printing establishment, samples of printed material - simple words, and large scale models of letters. Provide each child with a shop-type apron for protecting clothing. Set up the following art activities allowing the children to move freely from activity to activity.

Printing: Provide several shallow containers of different colored easel paints. Have the children "paint" by dipping a model of a letter into the paint and making impressions on easel paper. Allow the children to begin by randomly printing letters. Patterns may later be added for duplication.
NOTE: Letter models may be Lauri Crepe Foam Rubber alphabet pieces or letters cut from sponge.

Spatter Painting: Provide the children with squares of wire screening which have been framed with plastic tape. Instruct the children to place the screen over letter models which he has arranged on easel paper and spatter paint using a finger nail brush and easel paint.

Rubbings: Provide the children with alphabet models varying in size and texture. Encourage the children to take rubbing of the alphabet models using crayons, chalk, or pencils. Display the children's completed work in the center.

Evaluation: Teacher observation/child response/finished product.

Activity: Alphabet Sort -- Upper and Lower Case Letters

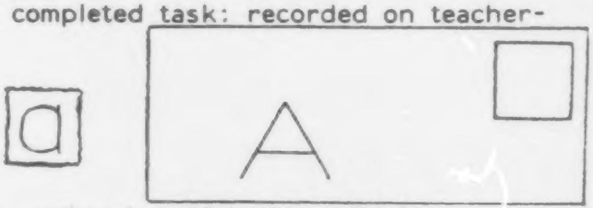
General Objective: To classify alphabet letters by physical properties which distinguish them into sets of upper case and lower case letters.

Specific Objective: The child will place each alphabet letter into the appropriate container designed for upper case letters or lower case letters.

Materials: Representations of the letters of the alphabet in upper and lower case (Crepe foam rubber alphabet pieces are desirable, if available.) and two containers.

Procedure: Identify one letter from each set. Question the child to construct knowledge of the physical properties which distinguish the upper from the lower case. Display all alphabet letters in a random mix. Have the child identify sets from the random mix. Sort the letters into sets including one "error." Have the child determine the "error" and make the needed correction. Combine letters again to form a random mix. Provide containers and allow the child to sort the alphabet letters based on the established criteria of upper case and lower case. Upon completion have the child determine the accuracy of the work and make needed corrections.

Evaluation: Observation of accuracy of completed task: recorded on teacher-made checklist.



Activity: Post Office

General Objective: To provide a dramatic play setting in which the child is actively involved in the matching of upper and lower case alphabet letters

Specific Objective: Participating in the "Post Office" the child will match the lower case alphabet letter on the stamp to the corresponding upper case alphabet letter on the post card.

Materials: Post cards, stamps, clear contact paper, sticky for attaching stamps to letter, mail bags, mail boxes (small and large shoe boxes), mail sorting box (box with cardboard sections), rubber stamps, ink pads, used envelopes and stamps, pictures representing the post office, pencils, paper.

Procedure: Prepare a dramatic play center representing the "Post Office" using the suggested props. Prepare "post cards" with upper case alphabet letters representing the address. Cover with clear contact paper for durability. Prepare "stamps" using corresponding lower case letters. Cover with clear contact paper for durability. Instruct the child that he must match the lower case alphabet letter on the stamp to the corresponding upper case alphabet letter on the post card before the card may be mailed. (See Social Studies Section.)

Evaluation: Observation of accuracy of matched cards and stamps

Activity: Initial Sounds - A, B, C, D - Folder Game

General Objective: To promote auditory perception

Specific Objective: The child will identify pictorial representations of objects beginning with the same sound and then group the objects by placing them in an envelope denoting that sound.

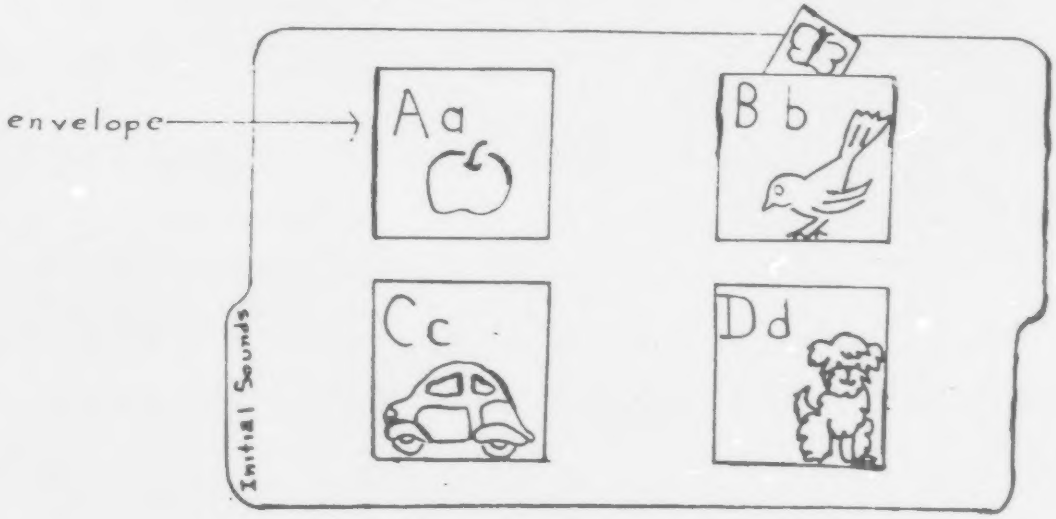
Materials: Sources for pictures: color books, catalogues, magazines, scissors, crayons, glue, four envelopes for storage, legal size manila file folders.

Procedure: To prepare the game use a legal size manila file folder. On the inside of the folder glue four envelopes as shown. Preceeding in alphabetical order, while working from left to right, print the upper and lower case letters, which will be used in the activity, on the envelopes. Paste or draw a picture of an object beginning with the matching letter on each envelope. Label the folder using the activity name. Introduce the prepared folder to the child. Ask the child to name each identifying letter and picture. The teacher describes the envelopes as being for pictures of things that begin with the identifying letters. Verbally repeat the names of each letter and identifying picture with the child. Provide the child with sources for pictures - color books, catalogues, and magazines. Ask the child to select pictures beginning with the initial sound of A, B, C, and D. Correct selections may be cut out, glued on a card and placed in the envelope denoting that sound. The teacher or child may print the identifying letter on the back of the card for a self-correcting activity.

Variation: Initial sounds may be extended to include folder games for the total alphabet.

This game would be introduced after instruction had taken place on initial sounds in words.

Evaluation: Observation of completed task; teacher-made checklist.



Activity: Blocks and Blue Prints

General Objective: To promote eye-hand coordination through the replication of a pattern

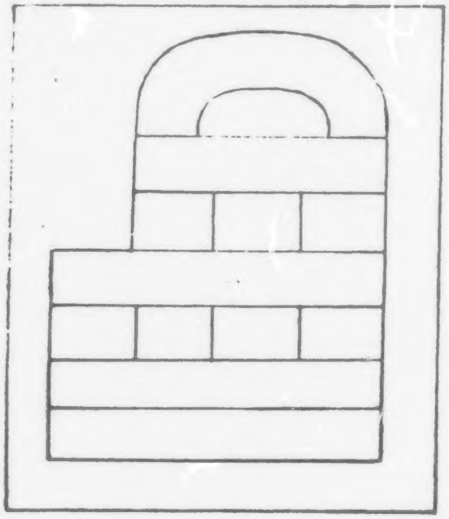
Specific Objective: Using a blue print of a block design the child will reproduce the design using unit blocks.

Materials: Unit blocks, large sheet of paper (approximately 36" wide and 60" long), marker for tracing

Procedure: Working in the block center, provide the child with a large sheet of paper. Place the paper on the floor. Encourage the child to place unit blocks on the paper forming a design. With a dark marker, trace the design. As blocks are removed from the design, encourage the child to identify each by shape. Have the child reproduce the design. Upon completion of the task have the child determine the accuracy of the work and make the needed corrections.

Additional Suggestions: Blue prints may be saved and stored in the block center developing a file of prints for future use. Blue prints may be made of designs which vary from simple to complex.

Evaluation: Observation of completed task.



Can you "plumb" these letters?

E F H I L O T X

Activity: Plumbing the Alphabet

General Objective: To promote eye-hand coordination through the information of identical sets.

Specific Objective: The child will form the letters E F H I L O T and X using PVC and fittings.

Materials: PVC Pipe: 3 12" lengths of straight 1" pipe, 25 6" lengths of straight 1" pipe, pipe fittings for 1" pipe size: 4 L's, 7 T's, 1 cross, activity instructions

Procedure: Present the PVC pipe to the child allowing time for exploration of physical properties. Discuss with the child the differing lengths of pipe. Present the pipe fittings to the child allowing time for exploration of physical properties. Discuss with the child the varying shapes of the fittings. Encourage the child to randomly explore putting pipes and fittings together to form varying designs. Present the activity instructions to the child. Allow the child to form the designated letters. Upon completion of the task have the child determine the accuracy of the work and make the needed corrections. Encourage the child to verbally describe the formation of the letters. Question the child as to the ability or inability to form all of the letters designated.
Variations: "Blocking" the Alphabet - Substituting unit blocks for PVC pipe and fittings have the child complete the task.

Evaluation: Teacher observation/observation of completed task as recorded on the checklist.

Activity: "What's Missing?"

General Objective To promote visual perception and memory skills

Specific Objective The child will recall members of a group of objects by verbally identifying members as they are removed from the group without seeing their removal.

Materials: Collection of four to seven objects with the same beginning sound or children's names prepared by using combinations of separate removable letters or familiar words prepared by using combinations of separate removable letters.

Procedure: Have the children verbally identify each object in the group by name. Question the children to construct knowledge of physical properties of each object. Display all objects. Have the children cover their eyes while the teacher removes one object from the group. Ask the children to determine "What's Missing?" Provide clues about physical properties of the object removed until the correct response to the question "What's Missing?" is received. Return the object to the group and repeat the experience using a different object.

Evaluation: Teacher observation/children's verbal response as recorded on the checklist.

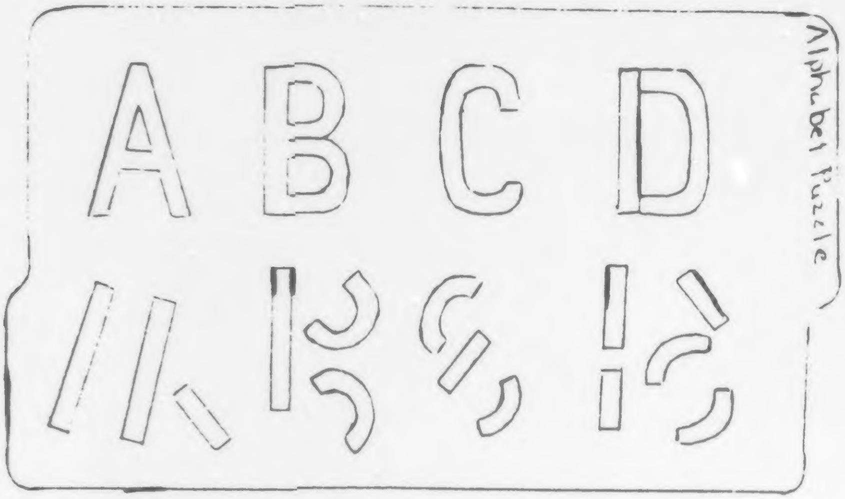
Activity: Alphabet Puzzle - Folder Game

General Objective: To promote the recognition of part-whole relationships

Specific Objective: The child will form the designated alphabet letters by placing the puzzle pieces on top of the pattern provided.

Materials: Legal size manila file folder, manila envelope, patterns for alphabet letters, glue, scissors, construction paper of varying colors, clear contact paper.

Procedure: To prepare the folder game begin by cutting 2 sets of each letter out of construction paper which has been covered with clear contact paper using a different color paper for each set. Proceeding in alphabetical order, while working from left to right, glue one set of the alphabet letter to the inside of the manila folder as shown on the followiing page. Cut one set of letters into pieces to be used as puzzle pieces. Glue manila envelope on the back of the folder for storing the puzzle pieces when not in use. Label the folder using the activity name. Introduce the prepared folder game to the child. Ask the child to name each alphabet letter noted. Place the corresponding puzzles below each letter. Instruct the child to arrange the puzzle on top of the letter noted.
Variations: Alphabet Puzzles may be extended to include folder games for the total alphabet, familiar words may be prepared as puzzles.



Evaluation:	Observation of completed task; teacher-made checklist.
Activity:	Child's Time Line
General Objective:	To identify and increase understanding of the ordering of actions and events into sequences and time frames
Specific Objective:	The child will order actions and events into chronological order through the preparation of a time line representing important events of the child's life.
Materials:	Long, narrow piece of sturdy paper or canvas-type material, photographs or drawings to be used as pictorial representations of important events of the child's life (birth, first home, school) glue, scissors, marker.
Procedure:	Record the important events of a child's life discussing the significance or meaning of each event. Aid the child in collecting pictorial representations of each event. Photographs may be brought from home, cut from magazines, or drawn by the child. Display all pictures in random order. Aid the child in placing the pictures in their proper sequence, while eliciting verbal descriptions for each picture. Provide the child with a long, narrow piece of sturdy paper or canvas type material. Encourage the child to place the illustrations on the paper in chronological order. After checking for sequences, allow the child to glue the illustrations into place. Encourage the child to verbally describe the significance of each event using one short sentence. Record the sentences on the time line. Upon completion of the time line encourage the child to follow the story in sequence with the teacher of class promoting a sense of personal history.
Evaluation:	Teacher observation/child response/observation of completed task.

Commercial games such as Bingo, Lotto or other alphabet recogniton/sound recognition games can be used with success in small group settings.

ACTIVITIES TO DEVELOP PRE-WRITING SKILLS

Activity: Snapping Shapes

Objective: Children will snap together pieces of felt that are the same shape.

Materials: Felt, snaps

Procedure: Cut assorted shapes out of felt, making two of each. Sew two or three snaps on each set of shapes. Direct children to snap together pieces of felt that are the same shape.
Variation: 1. Make a feet face with snap on eyes, mouth, nose, hair, etc.
2. Make a felt pumpkin for Halloween with snap on eyes, nose, and mouth.
3. Make a felt Christmas tree with snap on decorations.

Evaluation: Teacher observation; teacher-made checklist.

Activity: Finger Painting

Objective: Children will paint on paper using their fingers.

Materials: Fingerpaint, large newsprint or other sturdy paper, paint shirts or smocks.

Procedure: Provide children with fingerpaint and large newsprint. Direct them to paint using their fingers. Can be useful in stressing left-to-right orientation.
Variation: 1. Fingerpaint with instant pudding or shaving cream.
2. Make handprints using fingerpaint.

Evaluation: Teacher observation

Activity: Easel Painting

Objective: Children will paint with brushes and tempera paint on large newsprint that has been placed on an easel.

Materials: A free standing easel, tempera paint, large newsprint, sturdy brushes with wide handles, paint shirts or smocks.

Procedure: Place large newsprint on an easel. Provide tempera paint and brushes. Direct children to paint freely on the newsprint.
Variation: 1. Cut newsprint in the shapes of Christmas trees. Paint green and red.
2. Cut newsprint in the shape of large hearts. Paint red or pink for Valentines Day.
3. Cut newsprint in the shape of large birds. Paint various colors.

4. Cut newsprint in the shape of large Easter eggs. Paint in pastel colors.

Evaluation: Teacher observation

Activity: Q Tip Painting

Objective: Children will paint on newsprint with tempera using Q tips.

Materials: Q tips, tempera paint, newsprint, paint smocks or shirts.

Procedure: Direct children to paint on newsprint using Q tips dipped in tempera.

Evaluation: Teacher observation.

Activity: Coloring

Objective: Children will color with crayons on paper.

Materials: Large, unwrapped crayons, newsprint or standard manila paper.

Procedure: Provide children with large, unwrapped crayons and paper. Direct them to color. Using coloring books or color sheets destroys creativity!
Variation: 1. Place a large sheet of butcher paper on a blank wall. Allow children to color on it freely.
2. Put all the tiny bits and pieces of crayons in muffin tins. Melt them in a hot oven. Cool and remove to make large new crayons. Direct children to color with them on very sturdy paper.
3. Allow children to trace around their hands with crayons and create a picture out of the tracing.
4. Fold standard manila paper into four sections. In each section print a specific letter. Direct the children to color a picture of something that begins with that letter in its section.
5. Direct the children to create a picture with crayons by drawing nothing but circles.

Evaluation: Teacher observation.

Activity: Play Dough

Objective: Children will manipulate play dough with their hands.

Materials: Play dough, pieces of laminated cardboard 8" x 12", cookie cutters, mallets, dowels.

Procedure: Make enough play dough for each child to have a fist sized ball. The following recipe is excellent.

Play Dough

2 cups flour	2 tsps. cream of tatar
1 cup water	1 T cooking oil
½ cup salt	food coloring

In a medium saucepan combine flour, salt, and cream of tartar. Stir food coloring into water. Add the water, along with the cooking oil, to the dry ingredients. Mix well. Cook over medium heat for three minutes or until a ball begins to form. Remove from heat, cool slightly, then knead until pliable. Store in a plastic bag placed inside an airtight container such as a coffee can.

Give each child a large piece of laminated cardboard (or cardboard covered with contact paper) to use as a work space. Direct the children to manipulate the play dough with their hands. Provide cookie cutters, small mallets, and dowels for the children to use with the play dough.
Variation: Draw large letter shapes on cardboard and laminate. Direct children to form play dough around the shapes of the letters.
(See Creative Art and Cooking Sections for other recipes.)

Evaluation: Teacher observation.

Activity: Bakers Clay

Objective: Children will knead bakers clay and form shapes with it.

Materials: Bakers clay, cookie sheets

Procedure: Direct children in making bakers clay using the following recipe:

Baker's Clay

1 cup of salt
4 cups of flour
1½ cups of water (food coloring added, if desired)
Mix ingredients by hand, adding more water if necessary. Knead about 5 minutes.

Direct children to form shapes with the baker's clay they have made. Place their creations on cookie sheets and bake at 300° for 2 hours or until hard all the way through.
Variation: 1. Pat out the baker's clay and cut shapes from it with cookie cutters. Bake as directed.
2. Use Christmas cookie cutters to cut shapes with the baker's clay. Punch a hole through the top of each "cookie" before baking. Bake as directed and paint with tempera when cool. Run a piece of yarn through the hole after the paint has dried and hang on the Christmas tree.
3. Make valentines. Cut baker's clay with heart-shaped cookie cutters. Bake as directed. Paint hearts with red or pink tempera.

4. Direct children to roll the baker's clay into ropes. Have them form the ropes into letters. Bake as directed.
5. Direct children to make letters as in #4 that spell out their name. Bake as directed and paint with tempera when cool. After the paint has dried, glue the letters of each child's name on heavy cardboard or wood to make a name plaque.

Evaluation: Teacher observation.

Activity: Salt Ceramic Beads

Objective: Children will manipulate salt ceramic to form beads and will string the beads using yarn and blunt needle.

Materials: Salt ceramic, yarn, blunt needles.

Procedure: Make salt ceramic using the following recipe. (One batch makes a ball the size of an orange.)

Salt Ceramic Beads
1 cup of salt
½ cup of cornstarch
3/4 cup of water (Food coloring may be added)

Stir ingredients together in a pan. Cook over medium heat until mixture forms a blob (stirring constantly). Remove from heat, cool slightly, and knead until pliable.

Direct children to form the salt ceramic into large round beads. After the beads have been formed, have the children thread a blunt-edged needle with yarn. Direct children to push the threaded needle through each bead and pull it down on to the yarn. When all the beads are on the yarn, have the children tie the ends together to make a necklace. Dry for 24-48 hours before wearing.

Evaluation: Teacher observation.

Activity: Beads

Objective: Children will string beads.

Materials: Beads in assorted colors and shapes, strings.

Procedure: Provide beads in assorted colors and shapes. Direct children to string them.
Variation: Make design cards of heavy cardboard. For each card draw a picture of the beads in a specific color/shape pattern. Try to make the pictures as three-dimensional looking as possible. Laminate. Direct children to string beads using the design card as a guide.

Evaluation: Teacher observation.

Activity: Edible Necklaces

Objective: Children will string cereal on to yarn and make a necklace.

Materials: Fruit Loops or Cheerios, yarn, blunt needles.

Procedure: Direct children to thread a blunt needle with yarn and tie a knot on one end. Have them string Fruit Loops or Cheerios on to the yarn, pushing the needle through the hole. When the yarn is full, direct them to tie the ends together in order to make a necklace.

Evaluation: Teacher observation.

Activity: Pegs

Objective: Children will place pegs on a peg board.

Procedure: Provide pegs and peg boards. Direct children to place the pegs in the holes on the boards.
Variation: 1. Make design cards for the peg boards. For each card, cut a piece of cardboard the same size as the peg board. Make blank dots on the cardboard to represent each hole in the peg board. Using a hole puncher, make dots out of construction paper in the same colors as the pegs. Glue the construction paper dots on top of the black dots in a pattern. Laminate. Direct children to place pegs on a peg board in a design like one on the card.
2. Make design cards in the same manner as above and glue the construction paper dots in the shape of different letters.

Evaluation: Teacher observation; teacher-made checklist.

Activity: Paper Tearing

Objective: Children will tear pieces of construction paper and paste them on newsprint.

Materials: Construction paper, paste, newsprint.

Procedure: Direct children to tear construction paper into small pieces and paste on newsprint.
Variation: 1. Direct children to make a design with the torn pieces of construction paper.
2. Print the shape of a letter lengthwise on a piece of construction paper. Direct children to tear pieces of construction paper and paste around the letter.

Evaluation: Teacher observation; teacher-made checklist.

Activity: Collage Letters

Objective Children will paste various pieces of fabrics, yarn, buttons, and other materials around the shape of a letter.

Materials: Fabric scraps, yarn scraps, buttons, other odd leftover materials, paste, construction paper.

Procedure: Print a large capital letter on a piece of construction paper. Direct children to paste fabric scraps, yarn, buttons, etc. around the shape of the letter.
Variation: 1. Make one letter every day until the alphabet has been completed. Save each letter and direct the children to make their own alphabet books using a hole puncher and yarn.
2. Print each child's name Paste materials on each letter in the same manner as above.

Evaluation: Teacher observation.

Activity: Cutting

Objective: Children will cut on paper with blunt scissors.

Materials: Blunt scissors, construction paper or other colorful, thin paper.

Procedure: Provide blunt scissors and paper. Direct the children to cut with the scissors, helping them position their fingers correctly if necessary.
Variation: 1. Mark off straight lines on paper. Direct children to cut along them.
2. Make simple shapes on construction paper such as circles, squares, and triangles, and have children cut them out.
3. Make seasonal shapes on construction paper, such as pumpkins for Halloween, and have children cut them out.
4. Fold a piece of white paper into quarters. Direct children to cut pieces from it. Unfold and it's a snowflake.

Evaluation: Teacher observation; teacher-made checklist.
(Be sure to have left handed scissors available to satisfy those children that cut left handed.)

Activity: Cutting and Pasting

Objective: Children will cut with blunt scissors and paste onto paper what they have cut.

Materials: Blunt scissors, paste, construction paper or other thin paper, magazines, newsprint.

Procedure: Direct children to cut pieces of paper or magazine pictures and paste on newsprint.

Variation: 1. Direct children to cut pictures of food from magazines and paste on a paper plate.

2. Make geometric shapes on construction paper. Direct children to cut out the shapes and paste on newsprint in a design of their choice.

3. Make an alphabet chart for each child out of cardboard. Make another letter chart on construction paper, marking off the lines between letters clearly. Direct the children to cut out the letters of the construction paper chart and paste to the corresponding letters on the cardboard chart.

4. Make a number chart and proceed as in 3.

5. Direct children to cut pictures from a magazine of things that begin with a specific letter. Allow the children to paste the pictures on a large piece of butcher paper.

Evaluation: Teacher observation; teacher-made checklist.

Activity: Rain picture

Objective: Children will color pictures of a rainy day and paint on the pictures with tempera paint using toothpicks.

Materials: Crayons, newsprint, gray tempera paint (or very watery black paint), toothpicks, paint shirts or smocks.

Procedure: Direct children to color a picture depicting a scene that might happen on a rainy day. When the picture is complete, allow the children to paint raindrops on it using a toothpick and gray tempera paint.

Variation: Direct children to color a field of flowers. Have them paint stems of grass around the flowers using toothpicks and green tempera.

Evaluation: Teacher observation.

Activity: Sewing

Objective: Children will sew on pieces of burlap using yarn and a blunt needle.

Materials: Burlap, yarn, blunt needles.

Procedure: Cut squares of burlap about 10 x 10. Have children thread a blunt needle with yarn and tie a knot on one end. Direct them to sew on the burlap with the threaded needle, stressing the process of going "in" and "out" of the material.

Variations: 1. Sew on styrofoam meat trays.

2. Make a Christmas tree ornament. Cut a circle out of cardboard about 5" in diameter. Punch holes all the way around the edge. Direct children to sew in and out of the

holes. Have the children paste a picture of themselves in the middle of the sewn circle. Punch another hole at the top and have the children run a piece of yarn through it to make a loop.
3. Make a valentine, cut a heart out of cardboard and proceed as directed in number two.
4. Punch holes in the shape of a specific letter on a piece of cardboard or a styrofoam meat tray. Direct children to sew in and out of the holes.
5. Make a zoo animal in a cage. Direct children to draw a picture of a zoo animal on construction paper and cut it out. Have children paste the animal horizontally on a styrofoam meat tray. Punch holes along the rim of the tray above and below the animal, making sure there are the same number of holes on each side. Direct the children to sew yarn in and out of the holes going across the meat tray.

Evaluation: Teacher observation; teacher-made checklist.

Activity: Pipe Cleaner Shapes

Objective: Children will form shapes with pipe cleaners.

Materials: Pipe cleaners in assorted colors.

Procedure: Give children pipe cleaners and direct them to form the pipe cleaner into a shape.
Variations: 1. Direct children to shape the pipe cleaners into simple geometric designs such as circles, squares, or triangles.
2. Direct children to shape the pipe cleaners into letters.
3. Direct children to shape the pipe cleaners into numbers.

Evaluation: Teacher observation.

Activity: Sandpaper Letters

Objective: Children will feel letter shapes cut out of sandpaper.

Materials: Sandpaper, scissors.

Procedure: Cut medium sized letters out of sandpaper. Direct children to feel them and trace over them with their fingers.
Variations: 1. Cut the letters out of carpet scraps instead of sandpaper.
2. Place letters in a large paper sack. Have one child pull a letter out of the sack and ask the other children what it is.
3. Put letters inside socks and hang them from a low clothesline. Direct children to feel each sock and guess what letter is inside.
4. Blindfold one child at a time. Have the child feel a letter and tell what it is.

Evaluation: Teacher observation; teacher-made checklist.

Activity: Stained Glass Windows

Objective: Children will make a stained glass window using tissue paper and glue.

Materials: Black construction paper (preferably large), glue, water, tissue paper, paint brushes, paint smocks or shirts.

Procedure: Fold black construction paper in half. Cut a window out of one half, leaving an inch rim of paper all the way around. Mix glue with a little water to thin it. Direct children to paint the glue mixture on the half of the paper that has not been cut, covering the surface completely. Have the children tear off pieces of tissue paper and press on to the glue covered paper. After the surface has been completely covered with tissue paper pieces, direct the children to paint the glue over the top, smoothing down any overlapping pieces. Next, to complete the project, have the children paint the rim of the other half of construction paper and fold back over the tissue paper covered half to make a frame.

Evaluation: Teacher observation.

Activity: Shoestring Tying

Objective: Children will lace and tie shoelaces on a cardboard practice shoe.

Materials: Shoelaces, cardboard

Procedure: Make an adult size shoe shape on heavy cardboard and decorate like a tennis shoe. Punch holes where the laces are supposed to go in and out. Direct children to practice lacing and tying using the cardboard tennis shoe.

Evaluation: Teacher observation.

Title: Stencil Fun

Objectives: The child will gain practice in holding a writing instrument and will gain eye-hand coordination.

Materials: Scissors, posterboard, pencil or crayon, tape, paper, marker, (Alphabet chart is at the end of this section.)

Procedure: Using a pattern of upper and lower case letters of the alphabet and/or numerals, the teacher makes a set of letters and numerals for the children to trace. The pencil stroke should be outlined on each letter to show the child the direction of the pencil as the letter is made. A variation could be to cut poster board into 3" squares and to cut the stencil from the middle, leaving the negative (cut-out). The child uses the "cut-out" stencil to trace and/or color in as the square is placed on top of drawing paper.

Evaluation: Teacher observation; teacher-made checklist.

The following activities promote and develop the skills necessary in handwriting.

1. Paintin' In the Air
   Give children clean paint brushes and instruct them to paint various objects on the walls or in the air. Discuss this imaginary art with the children.

2. Big Circles/Little Circles
   Give children a large sheet of newsprint and crayon or marker. Instruct them to make very big circles in a counterclock-wise direction, then reverse the direction. Demonstrate the movement. Repeat the activity asking them to draw small circles.

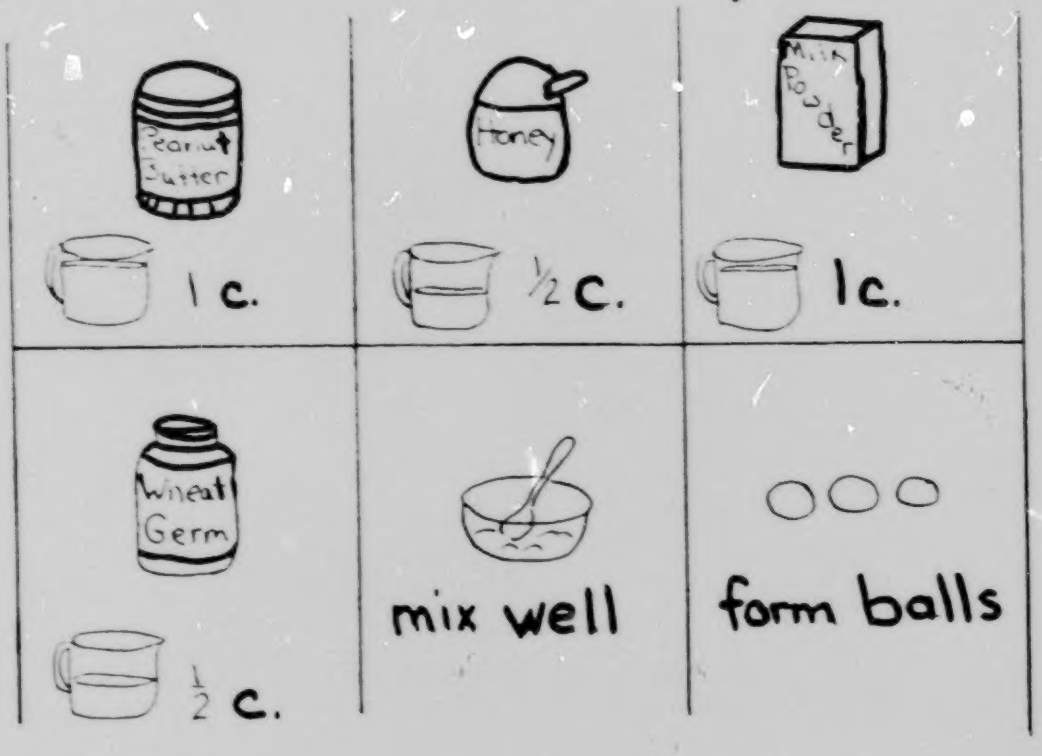
3. Name Game
   The teacher should make a sentence strip name card for each child. (The child's first name only should be written until that is mastered by the child.) The card should be attached to the table seat assigned to the child. Whenever the child completes a workpaper or art project she/he should be instructed to write his/her name on the paper using the name card as a guide.

4. Pegboard Copy-Cat
   The child should be given cards with various designs (simple at first) and told to reproduce on the pegboard using pegs. These cards can be teacher-made.

All of the activities given in the Creative Art section of this resource book serve to prepare children for handwriting. As the child matures and shows interest, activities involving the typewriter, computer, and manuscript writing of words may be appropriate as well as stimulating. Long sessions of repeated paper and pencil drill work on any letter or letters and/or numerals is not appropriate for children this age.

Teacher instruction of children in the development of handwriting techniques requires small group interaction and a watchful teacher. Children need to be shown the proper way to hold the writing tool, proper posture, and position of paper. The wise kindergarten teacher will confer with the first grade teacher and agree on the degree of instruction given during the kindergarten year in this regard. The kindergarten teacher should also be aware of the school adopted handwriting program and use it whenever giving any type of instruction and especially in the construction of letters that are found in the room as a part of displays or learning centers.

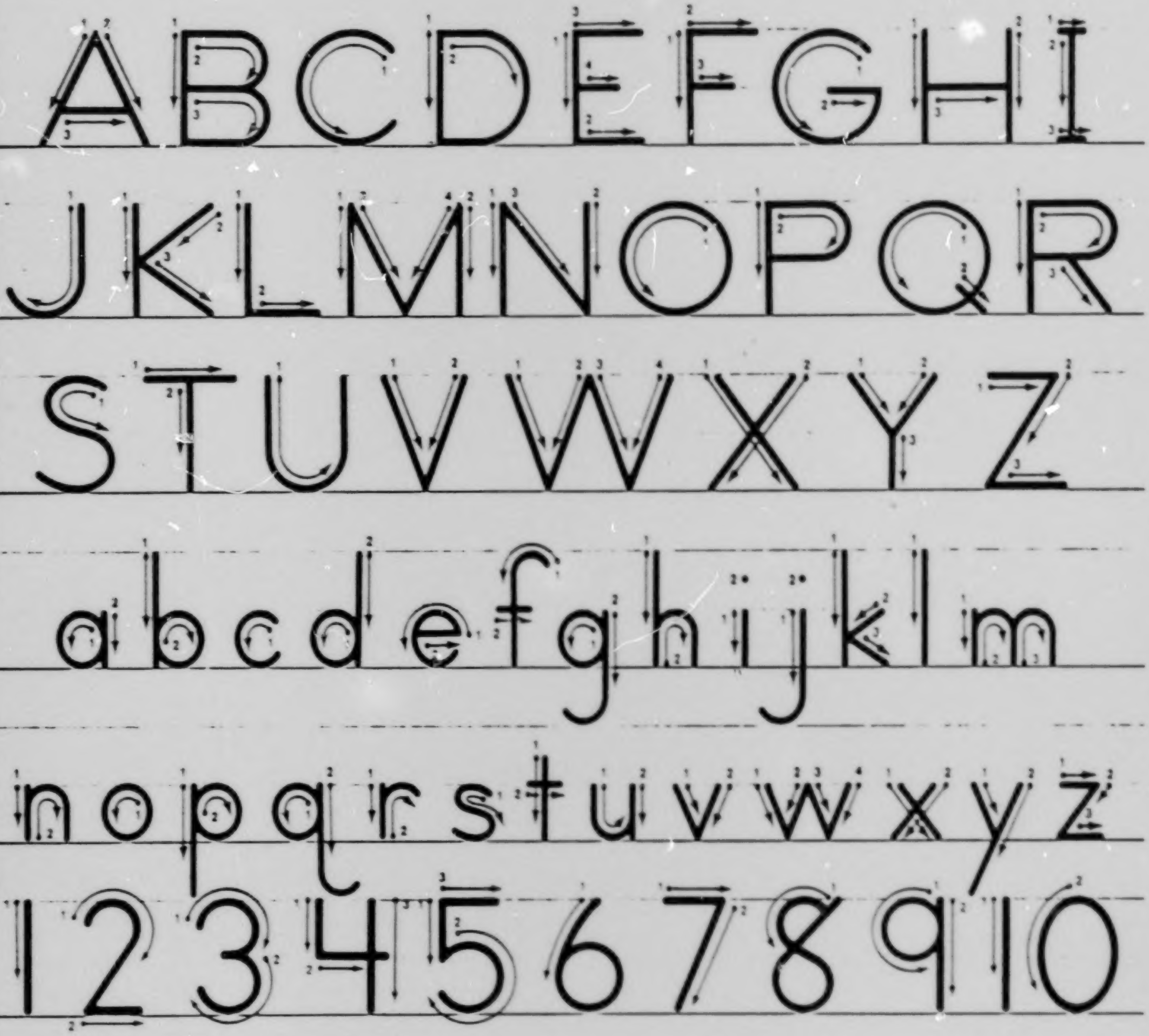
Peanut Butter Candy


Peanut Butter
1 c.
Honey
½ c.
Milk Powder
1c.
Wheat Germ
½ c.
mix well
form balls

Variation:

Candy may be formed into alphabet letters or simple words rather than balls.

Variation: Candy may be formed into alphabet letters or simple words rather than balls.


ABCDEFGHI
JKLMNOPQR
STUVWXYZ
abcdefghijklm
nopqrstuvwxyz
12345678910

Zaner/Bloser Handwriting Basic Skills and Application, 1984.

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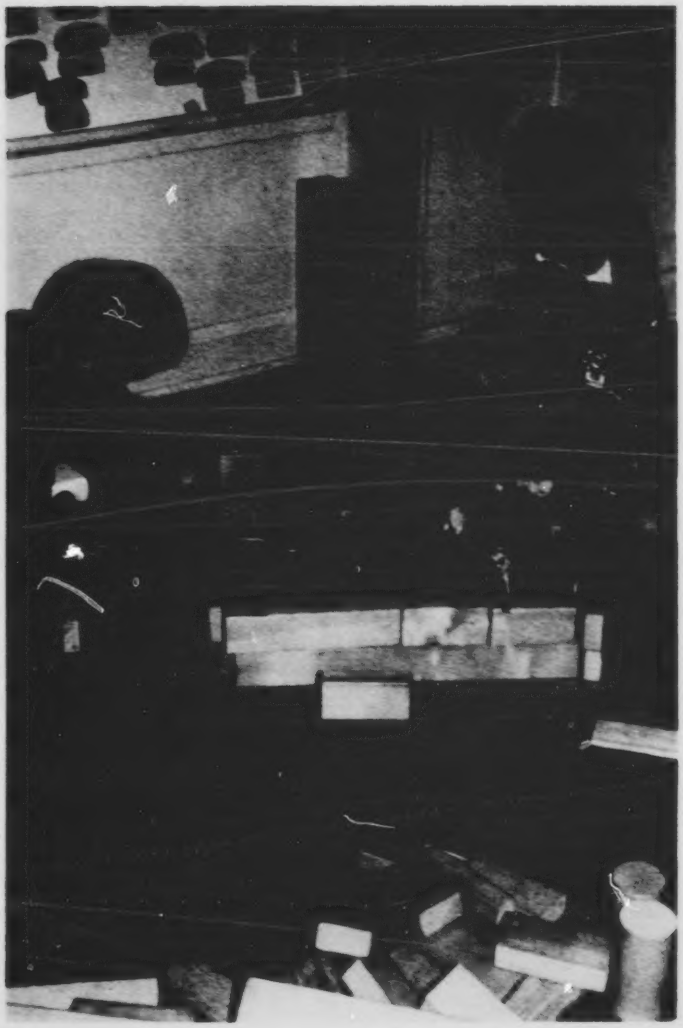
Social Studies



INTRODUCTION

RATIONALE

Social studies has been defined as the subject where we study people and their relationships with other people and their environment (Moffett, 1977). The key terms within this definition, people, relationships with other people, and environment entail much more than the three words denote.

In the study of "people," we explore the individual: self awareness, the ability to think, to develop values and skills in decision making. In developing self understanding, interests, etc., the foundations for career awareness are laid. In studying "relationships with other people", we develop an awareness of likenesses and differences among people and likenesses and differences between different ethnic and cultural groups. Respect, equity, acceptance, etc. of different groups are stressed. Skills in getting along with others, cooperating, developing a sense of working individually and in group situations toward civic responsibilities are enhanced.

In designing a curriculum in social studies, one must become cognizant of the ultimate goals and purposes of education. Questions as "Why do schools exist?" and "What does society expect of the school institution?" should be reviewed constantly. The "environment" in which we live, to a large extent, determines the curriculum which our schools choose to undertake. This "environmental" study includes a study of the past as well as the present and future. The "past" includes an awareness of how "we" as a nation, country, etc. came to be. The "present" denotes a sense of economic awareness and making education experiences more relevant to the world in which we live. As to the "future", today's world is one of vast and constant change. Children are in need of assistance in adjusting to this rapidly ever-changing society. By integrating concepts of past, present, and future, it is the intent of the social studies curriculum to equip children with the necessary concepts, understandings, and skills to cope effectively within the world in which they live.

CONCEPT LEARNINGS

Many school districts adapt Hanna's "expanding environments" plan for determining scope and sequence for their social studies programs. According to this approach, the child's earliest learnings are developed from experiences that are near and familiar (grades K-3). Later learnings (grades 4-8) are selected from content that is further removed (Moffet, 1977). For the kindergarten child, the immediate environment includes home, family, animals, friends, school, neighborhood, community, stores, etc. Recent trends in social studies such as self awareness, decision making, valuing, career awareness, cultural pluralism, ethinic studies, economic awareness, and awareness of advanced technology are interjected within this "immediate environment" framework.

In applying Hanna's theory of expanding environments, this section on social studies is divided into five major areas: ME, ME AND OTHERS, ME AND MY NEIGHBORHOOD, ME AND MY COMMUNITY, ME AND MY WORLD.

SELECTED VOCABULARY TO BE TAUGHT

ME

This unit of study involves development of self awareness. Selected vocabulary may include eyes, hair, ears, nose, mouth, feet, hands, clothes, likes, dislikes, play, work, foods, alike, different, feelings, happy, sad, excited, embarrassed, wants, needs, decisions.

ME AND OTHERS

This unit of study is centered upon awareness of others and developing effective relationships with others. Selected vocabulary may include: alike, different, big, small, family, aunt, uncle, brother, sister, grandmother, grandfather, home, kitchen, den etc., teachers, friends, Indian, Eskimo, Negro, Caucasian, Vietnamese, Chinese etc., animals, pets, dogs, cats etc., farm animals, zoo animals, the handicapped, blind, deaf, retarded, crippled, working in groups, cooperation, being on time, sharing, being orderly.

ME AND MY NEIGHBORHOOD

This unit stresses the study of the immediate environment outside the home. Selected vocabulary may include: yours, mine, ownership, property, address, places, park, zoo, car, truck, bus, home, school, library, street, highway, block, right, left, directions, up, down, between.

ME AND MY COMMUNITY

This unit involves study of the community and all of the constituents in its operation. Selected vocabulary may include: post office, mailman, fireman, policeman, (community helpers) stores, fire station, police station, airport, city, town, country, farm, zoo, workers, (secretary, truck driver, etc.) distributor, expensive, coupons, sale, save, factory, machines, computers, Atari, map.

ME AND MY WORLD

This unit of study involves an awareness of the existence of more remote areas than is customary in the world of the kindergarten child. Selected vocabulary may include: week, day, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, calendar, holidays, Columbus Day, globe, ocean, United States, land, Thanksgiving, Pilgrims, Indians, turkey, feather, Halloween, scary, ghost, haunted, Christmas, Santa Claus, Rudolph, Easter, rabbit, polka dots, hop, flop, Valentine's Day, letter, message, communicate, newspaper, news, transportation, airplane, train, travel, distance, ship, state, Mississippi.

INSTRUCTIONAL TECHNIQUES

This section is designed to provide a guideline of units of study and activities for the kindergarten child in the area of social studies. Individual and group activities are presented. Each activity is designed so as to develop specific social studies concepts. Specific readiness skills such as auditory discrimination, visual discrimination, listening, speaking, language development, and concept attainment are enhanced within each activity. Art, music, story books and fingerplays may be used with the activities. Each activity is only a guide and may be added to or extended for a period of days or weeks or deleted depending upon developmental levels and individual differences among children.

INSTRUCTIONAL MANAGEMENT

ME (SELF AWARENESS)

Major Objectives:

1. The student will verbally describe likenesses and differences among classmates.
2. The student will draw a picture of how he feels most of the time.
3. The student will draw pictures of his interests, likes, favorite foods, etc.
4. The student will make his own decision in specific situations.

ME AND OTHERS

Major Objectives:

1. The student will communicate, share, and work in groups with others.
2. The student will recognize traits (taking turns, getting along with others, accepting differences of others, cooperation, completing tasks, etc.) as necessary social skills.
3. The student will work "independently" in situations.
4. The student will recognize animals as "others" in his environment.

ME AND MY NEIGHBORHOOD

Major Objectives:

1. The student will recite his address.
2. The student will commmunicate in various "neighborhood" situations (reporting a fire, paying the paper boy).
3. The student will designate items as yours, mine, or ours.
4. The student will identify important roles of the persons responsible for the operation of the school.

ME AND MY COMMUNITY

Major Objectives:

1. The student will name various components within a community (post office, fire station, stores, houses, park, factory, etc.).
2. The student will name various workers (mailman, carpenter, etc.) within the city.
3. The student, in order to develop an awareness of economic concepts, will contrast prices of store items, note how much is saved, etc.
4. The student will name various types of machines and explain how they are used.

ME AND MY WORLD

Major Objectives:

1. The student will name days of the week and special holidays.
2. The student will identify several modes of communication (television, newspaper, etc.) in relaying information in our society.
3. The student will identify several means of travel.
4. The student will identify his street address, telephone number, city, and state.

GENERAL MATERIALS

1. Magazines, books, pamphlets (from which to obtain pictures)
2. Pictures of parts of the body, emotions, people of different ethnic groups, food, community helpers, means of transportation, various household items, animals, machines, various places, (park, farm, etc.) holidays, Mississippi.
3. Storybooks about all the concepts named to be developed.

4. Songs about concepts (listed in this section.)
5. Art about concepts (listed in this section.)
6. Fingerplays about concepts (listed in this section.)
7. Tagboard
8. Large cardboard boxes
9. Small cardboard boxes
10. Pieces of cardboard on which to mount pictures, etc.
11. Shoe boxes, other boxes of various sizes and shapes
12. Paper plates, sacks, empty paper rolls
13. Cotton balls
14. Crayons, paint, paste, glue
15. Map of Mississippi

SUGGESTED FINGERPLAYS

ALL BY MYSELF

There are many things that I can do, all by myself.
I can comb my hair and lace my shoe, all by myself.
I can wash my hands and wash my face, all by myself.
I can put my toys and blocks in place, all by myself.

EATING LUNCH

When the sun is high in the sky, (Point up.)
And I'm hungry as I can be, (Look sad, rub tummy.)
I run inside to eat my lunch (Move feet quickly.)
Now look at the smile on me! (Point to smile.)

GOOD WARM SOUP

When the snow is falling down (Move fingers as you bring arms down.)
And cold winds begin to blow, (Shiver.)
I eat some good, warm soup and then (Pretend to eat.)
I'm warm from head to toe! (Point to head then to foot.)

RESTING

I saw a child a'resting, oh so well!
He knew how to rest; how could I tell?
His head was down, his feet were still.
His hands were just the same.
I wonder if you know his name.

A little work, a little rest, a little play
Help all children have a happy day.

At rest time we lie right down.
We do not make a single sound.
We do not wiggle around and around.
So quietly, quietly lying down.
Shh, everybody, quiet all around!
Shh, everybody, quiet all around.
Shh, everybody, pretend you're fast asleep!

COURTESY

"I'm sorry!" "Thanks,"
And, "Pardon me!"
Are friendly words
You'll all agree
So use these words
And you will see
How all respond to
Courtesy!

GETTING ACQUAINTED SONG

I am ______________, I am ______________.
Who are you? Who are you?
I am ______________, Who-ooo are you?
I am ______________, I am ______________.
(Final line by other child.)

SHARING

I have some popcorn; smack, smack, smack!	(Cup hands; lick lips.)
Here come my friends; I'll turn my back.	(Turn around, hiding corn.)
But sharing is nice, and sharing is fun.	(Turn back and smile.)
Have some popcorn, everyone!	(Hold out hand.)

SHARING

I have two and you have none.	(Hold up two fingers on left hand, none on
If I share, we each have one.	right. Hold up one finger on each hand.)

SHARING WITH A FRIEND

I have two good red apples.	(Hold up one finger on each hand.)
They're big and round, you see.	(Make big circle with both hands.)
I'll give one to you.	(Pretend to give one to a friend.)

LOVE

When I love you	(Point to other person.)
And you love me,	(Point to self.)
We're both as happy	(Clap hands.)
As we can be!	(Continue to clap hands.)

TEN LITTLE FRIENDS

Two little houses across the street.	(Close fist.)
Open the doors and then friends meet.	(Open fingers.)
How do they do, and how do you do!	(Fingers bow to each other.)
Such nice summer weather.	
Off they hurried to nursery school	
Ten little friends together.	

PUMPKIN SONG (Tune: "Mary Had a Little Lamb")

We are pumpkins, big and round,
Big and round, big and round,
We are pumpkins big and round,
Sitting on the ground.
See our great big shiny eyes,
Shiny eyes, shiny eyes,

Looking all around.
See our great big laughing mouths,
Laughing mouths, laughing mouths,
Smiling right at you!

IT'S HALLOWEEN (Tune: "Oh, Do You Know the Muffin Man")

Oh, do you know it's Halloween
It's Halloween, it's Halloween?
Oh, do you know it's Halloween
It's Halloween tonight?
We'll make a funny pumpkin face,
Pumpkin face, a pumpkin face.
We'll make a funny pumpkin face,
To give someone a fright.
We'll listen to the cat's meow,
The cat's meow, the cat's meow.
We'll listen to the cat's meow
All through the night.
We'll see the ugly witches fly,
Witches fly, witches fly,
We'll see the ugly witches fly,
Into the pale moonlight.
We'll laugh to see the goblins dance,
The goblins dance, the goblins dance.
We'll laugh to see the goblins dance
A-whirling with delight.
Oh, I'm so glad it's Halloween,
It's Halloween, it's Halloween.
Oh, I'm so glad it's Halloween,
We'll have such fun tonight.

MY PUMPKIN

See my pumpkin round and fat, (Make big circle.)
See my pumpkin yellow.
Watch him grin on Halloween, (Draw grin with hands.)
He's such a funny fellow. (Grin broadly.)

COMMUNITY HELPERS

MAIL

Five little letters lying on a tray. (Extend fingers of right hand.)
Mommy came in and took the first away. (Bend down thumb.)
Then Daddy said, "This big one is for me."
I counted them twice now there were three. (Bend down pointer finger.)
Brother Bill asked, "Did I get any mail?"
He found one and cried, "A letter from Gale!" (Bend down middle finger.)
My sister Jane took the next to the last,
And ran upstairs to open it fast. (Bend down ring finger.)
As I can't read, I'm not able to see
Whom the last one's for, but I hope it's for me! (Wiggle the little finger, then clap hands.)

TEN BRAVE FIREMEN

Ten brave firemen sleeping in a row, (Fingers curled to make sleeping men.)
Ding, Dong, goes the bell, (Pull down on the bell cord.)
And down the pole they go. (With fists together make hands slide down pole.)
Off on the engine Oh, oh, oh. (Pretend you are steering fire engine very fast.)
Using the big hose, so, so, so. (Make a nozzle with fist to use hose.)
When all the fire's out, home so-o-slow.
Back to bed, all in a row. (Curl all fingers again for sleeping men.)

FIVE LITTLE FIREMEN

Five little firemen sit very still (Hold up five fingers.)
Until they see a fire on top of the hill;
Number one rings the bell, ding--dong; (Bend down thumb.)
Number two pulls his big boots on (Bend down pointer finger.)
Number three jumps on the fire engine red; (Bend down ring finger.)
Number four puts a red fire hat on his head; (Bend down ring finger.)
Number five drives the red fire truck to the fire. (Bend down little finger.)
As the big yellow flames go higher and higher. (Spread arms.)
Whooooooo-ooooo! Whooooooo-ooooo! Hear the fire truck say.
(Imitate siren.)
As all of the cars get out of the way.
Shhh! Goes the water from the fire hose spout. (Rub palms together.)
And quicker than a wink the fire is out! (Clap hands.)

FIRE TRUCKS

THE FIRE TRUCK

I am a big fire truck	(Point to self.)
Rushing to a fire.	(Pretend to drive, as you run.)
I zoom around a corner	(Turn corner quickly.)
And stop right there!	(Stop suddenly.)
Firemen climb my ladders	(Pretend to climb.)
Up to their tops.	(Climb, peer over top.)
Firemen squirt my hoses	(Pretend to squirt hose.)
Until the fires stop!	

THE FIRE ENGINE

Toot! Toot! Toot! Hear the whistle blowing.
Ding! Ding! Ding! See the engine going.
Round the corner out of sight
Ever ready day or night!

TRAINS

THE LITTLE TRAIN

Here is a little train	(Hold up two fingers of right hand.)
Running up the track.	(Track is left arm held out.)
It says, "Toot-Toot."	(Stops at top.)
And runs straight back.	(Run fingers down left arm.)

THE TRAIN

The great big train goes down the track.
It says, "Toot,toot."
And then it comes back.

DOWN BY THE STATION

Down by the station, early in the morning,
(Tap leg or clap hands.)
Do you see the engines standing in a row?
Do you see the engineer pull the big whistle?
(Close fist, raise high, pull downward.)
Toot, toot, choo, choo, off we go.
(Blow for "toot," slide palms together for "choo.")

ANIMALS

THE TURTLE

This is my turtle (Make fist.)
And he lives in a shell.
He likes his home very much.
He pokes his head out when he wants to eat.
And pulls it back, when he goes to sleep. (Pull thumb back.)

SNAKES

At the zoo I saw a big snake. (Spread arms.)
He was thin and round and brown. (Make circle of thumb and forefinger.)
He was all curled up and sound asleep. (Move hand in circle.)
Under a bush on the ground. (Bend and pretend to look under bush.)

HOPPITY TOAD

I am a funny hoppity toad (Squat down.)
Trying to jump across the road. (Jump.)
Winking, blinking, my big eyes. (Blink eyes.)
Snapping at some bugs and flies. (Open and close mouth quickly.)

THE CHIPMUNK

A wee little chipmunk (Squat on floor.)
Popped out of the ground (Jump up.)
He stood very still then (Stand still.)
He looked all around. (Look around.)
He ran to the meadow; (Run.)
He sat in the sun. (Squat and remain still.)
Along came his good friend (Look at others.)
And they ran and had fun. (Run with friend.)

MR. RABBIT

Hop, hop, hop! goes Mr. Rabbit
Chom, chomp, chomp, he eats a carrot.
Blink, blink, blink, he winks at me.
Then hop, hop, hop, away he goes!
(Make appropriate actions.)

MY BUNNIES

"My bunnies must now all go to bed," the mamma rabbit said.
"But I will count them first to see if they have all come back to me."
"One bunny, two bunnies, three bunnies dear,
"Four bunnies, five bunnies...yes...all are here."
"They are the prettiest thing alive, my bunnies,
One, two, three, four, five."

MR. GIRAFFE

Mr. Giraffe has a long, long neck	(Measure with hands.)
Which makes him very tall.	(Reach to show height.)
And even when I stretch and stretch.	(Stretch.)
He makes me feel quite small.	(Put hand down to show low.)
He can reach leaves high on the trees,	(Stretch and reach.)
And look right over the wall.	(Stand on tiptoes.)
But I can put my head way down,	(Bend and put head way down.)
Which he can't do well at all.	(Shake head.)

THE SEALS

The seals all flap their shining flips
And bounce their ball on their nosey tips,
And beat a drum and catch a bar,
And wiggle with how pleased they are.

THE SEAL

There was a little seal.	(Hold up one hand.)
Who liked to dive and swim.	(Swoop hand down, then wiggle.)
He went down very deep.	(Swoop hand down lower.)
And no one could see him.	(Look down.)
The keeper threw a fish	(Throw with left hand.)
Seal opened his mouth wide.	(Spread thumb and pointer for mouth.)
And up he came so fast,	(Zoom hand up.)
He caught the fish inside.	(Close thumb and pointer.)

THE ZEBRA

This is the way a zebra walks, a zebra walks, a zebra walks,
This is the way a zebra walks, every day at the zoo.
(Sing these words to the tune of "The Mulberry Bush." Do appropriate actions, using other animals or other actions of a zebra.)

MRS. KANGAROO

Mrs. Kangaroo goes hop, hop, hop!	(Hop on both feet.)
She looks around, but does not stop.	(Look to right and left.)
She hops in a circle, she hops in a square.	(Hop in circle, square.)
She hops back home and stops right there!	(Head towards starting place and stop.)

A LITTLE CHIMPANZEE

I'm a little chimpanzee running in the zoo. (Point to self, run in circle.)
I can climb the bars so high and look down at you! (Pretend to climb, point.)

WEATHER

THE RAIN

Pitter, patter, raindrops,
Falling from the sky;
Here is my umbrella
To keep me safe and dry.
When the rain is over,
And the sun begins to glow,
Little flowers start to bud,
And grow and grow and grow!

A RAIN STORY

Pitter, patter, pitter, patter,
Hear the raindrops say,
But, if a sunbeam should peep out,
They'd make a rainbow gay.
Rumble, rumble, rumble, rumble,
Hear the thunder say,
But soon the clouds will all be gone,
And we'll go out and play.

PUDDLES

I like to walk through puddles (Step as through water.)
When the rain goes drippy-drip (Flutter fingers downward.)
I like to jump in puddles (Jump about.)
And I don't get wet a bit! (Shake head.)
You see, I put on rain boots, (Point to feet.)
A raincoat and a hat. (Point to clothing and head.)
Then I can jump in puddles. (Jump.)
Now, what do you think of that? (Shake pointer finger.)

IT'S RAINING

Look outside. It's raining. (Point to window.)
What shall we wear today?
Bright red boots, a raincoat warm, (Point to shoes, hug body.)
And a rainhat bright and gay. (Point to head.)
Look outside. It's raining. (Point to window.)
Won't we have fun today?
We'll walk through puddles, splash, splash, splash. (Pretend stepping in puddles.)
Oh, how we'll laugh and play. (Continue walking.)

RAINY DAY

It's a very rainy day,
And I can't go out to play.
So mother into her basket dipped (Left hand cupped as a basket, right hand in.)
And found some scissors--
Now I can snip, snip, snip! (Let fingers act as scissors.)

ME

Title: Hoky Poky

Social Studies Concepts Developed:
1. Self awareness
2. Basic map skills - directions of left and right

Readiness Concepts Developed:
1. Listening and following oral directions
2. Differentiating between left and right

Objective: Listening to an oral direction, the student will position his correct body part as stipulated by the direction.

Materials Needed: The "Hoky Poky" song

Procedure: The teacher and students demonstrate right and left body parts, etc. Teacher and students sing the Hoky Poky song positioning correct body parts as sung in the song.

Ways to Measure: Teacher observation of each child's ability to position correct body parts as sung in the "Hoky Poky" song.

Title: Alike and Different

Social Studies Concepts Developed:
1. Self awareness
2. Awareness of others

Readiness Concepts Developed:
1. Understanding of the concepts - alike, same, different, hair, eyes, blue, brown, curly, straight, big, little, thin, fat, etc.
2. Speaking skills

Objectives:
1. The student will verbally describe himself and others
2. The student will describe likenesses and differences among classmates.

Materials Needed: Mirror

The song, "Head, Shoulders, Knees and Toes," can be used as an introduction to talking about body parts.

Procedure: This activity can be extended over a period of days. Have students periodically look in the mirror and describe themselves. Have students look at each other (in pairs) and describe each other. Point out how we are alike (We all have two eyes.), how we are different (varied colors, etc.)

Ways to Measure: Teacher observation of each student's ability to describe himself and to note likenesses and differences among classmates.

Title: Look at ME, I'm Different!

Social Studies Concepts Developed:

1. Self awareness
2. Beginning decision making

Readiness Concepts Developed:

1. Manipulative skills (crayons, pencils)
2. Listening skills
3. Speaking skills

Objectives:

1. The student will draw and color himself on a large cardboard or white roll paper.
2. The student will draw pictures in response to questions asked.

Materials Needed: Large child sized cardboards (refrigerator boxes) or white roll paper, crayons, magic markers

Procedure: This activity can be extended over a period of days.

Work with "self" - Divide children into pairs. Have one child lie on his cardboard , and the other may trace a life size "self". Instruct the children to reverse rolls.

Children will work informally on their "self", coloring, choosing clothes, hairdos, etc. to put on the cardboard. As they are working the teacher will conduct an informal values clarification activity. As the questions are asked, students will draw pictures of their own personal answers on their "self" cardboard and discuss items that can not be drawn.

Values Clarificaiton Activity:
(valuing, prizing, choosing, analysis, synthesis, decision making)

1. You have $5.00 to spend at the grocery. What will you buy?
2. What do you like to wear?
3. What books do you like to look at?
4. Name a book you have recently looked at?
5. Who would you invite to your house after school?
6. What do you like to do at school?
7. What would you like to be doing when you are older?
8. What things can you do best?
9. What hobbies do you like?
10. If you had $10.00 to spend at the toy store, what would you buy?
11. If you could play hooky from school, what would you do?
12. What do you like best about yourself?

Ways to Measure: There are no right or wrong answers in this activity. The teacher may observe each child's drawing and responses in order to gain more insight as to each child's personality, likes, dislikes.

Title: My Feelings

Social Studies Concepts Devleoped:
1. Self awareness

Readiness Concepts Developed:
1. Listening skills
2 Speaking skills
3. Concept attainment (joy, suprise etc.)

Objectives:
1. The student will discuss experiences of situations of surprise, sadness, etc.
2. The student will draw a picture of how he feels most of the time.

Materials Needed: Pictures depicting various feelings - surprise, anger, joy, excitement, disappointed, fear, etc. The song, "If You're Happy and You Know It," can be used as an introduction to talking about feelings.

Procedure: Discuss and give examples of several feelings - happy, sad, excited, surprised, etc. Display pictures.

Values Clarification Activity:
(self evaluation, analysis, valuing)

1. The time I felt most important was...
2. The time I felt most scared was...
3. The time I felt most embarrassed was...
4. Name three feelings that describe how you feel most of the time.
5. Draw a picture of how you feel most of the time; discuss.

Ways to Measure: Teacher observation of child's ability to relay meaning of embarrassed, scared, etc. Insight will be gained about each child's personality through teacher observation of the picture drawn.

Title: Grab Bag (I Can See, Hear, Smell, Taste, and Touch.)

Social Studies Concepts Developed:
1. Self awareness
2. Awareness of senses; touch

Readiness Concepts Developed:
1. Listening skills
2. Concept attainment (long, short, soft, hard, prickly, smooth)

Objective:
1. The student will name senses and associated feelings, example: ears-hear, loud, soft.
2. The student will "touch" and identify an object.

Materials Needed: Pictures of senses - ears, mouth, etc.; a sack full of objects (ruler, pencil, etc.)

Procedure: This activity may be extended over a period of days. Discuss the senses and their importance to each individual person - taste, touch, smell, sight, hearing.

Brainstorming Activity - Name as many things as you can think of that are loud, soft; hot, cold; bright, dark; sweet, sour; smell nice, smell "not so nice".

Discuss the sense of touch - how things "feel" (long, short, hard, soft, prickly). The teacher collects items such as pencils, balls, rulers, crayons, cotton, rubberbands, etc. and puts them in a bag. The teacher asks the child to reach in the bag (without looking) to find a pencil, etc. How did you know? Describe how it feels. Find something soft, long, prickly, etc.

Ways to Measure: Teacher observation of each child's ability to name senses and associated feelings. Teacher observation of each child's ability to identify objects through touch (check list format).

Title: What Do I Want?
What Do I Need?

Social Studies Concepts Developed:
Beginning skills in economic awareness - differentiating between a want and a need.

Readiness Concepts Developed:
1. Listening and speaking skills
2. Context picture clues of familiar objects (concept attainment)

Objectives:
1. Given two items, the student will determine which item may be a want and which may be a need.
2. Given specific situations, the student will decide which item is needed in that particular situation.

Materials Needed: Pictures of familiar items - toothbrush, winter coat, cereal, videogame, soap, candy, toy dog, etc. (Cut these from magazines, coloring books, etc.)

Procedure: This activity may be extended over a period of days. The teacher discusses the difference between a want and a need. An Atari videogame is something you may want. Warm clothing in winter months is something you need. Hold picture cards and have children decide if the item is something they want or something they need. Develop given situations as:

"When I go out to play in the winter, I need a sled, coat, shovel. Have pictures with words for each of these items. Children choose the need in each situation."

Ways to Measure: Teacher observation of each student's ability to distinguish between a want and a need.

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Title: Making My Decisions

Social Studies Concepts:
1. Self awareness
2. Career concept
3. Self interest inventory

Readiness Concepts:
1. Listening skills
2. Concept attainment
3. Context picture clues

Objective: The child will make a decision by placing his name card on his desired decision making situation.

Materials Needed: Pictures of various objects (words underneath), five to ten name cards for each child

Procedure: This activity may be extended over a period of days.

This is a group activity where each child is encouraged to make his own decision and at the same time to become accepting of decisions of others. Children sit in a circle. The teacher sits in the middle and provides several situations where students must make decisions. Examples are:

1. Which would you rather do?
   play read watch TV

2. Who would you like to be?
   Pete Policeman Terry Teacher Louis Lawyer

3. Which seasons of the year do you like best?
   winter summer spring fall

4. Where would you rather live?
   on a farm in a city

5. Which pet would you rather have?
   cat dog turtle parakeet

6. How do you have the most fun?
   alone with my friends few friends

7. Which do you like to do the most?
   play tennis swim ride bikes

8. Which do you like best?
   jello pie ice cream

9. Which do you like best?
   recess storytime show and tell

10. To whom would you tell a secret?
    teacher friend parent

11. If you had to go on a long trip, how would you rather travel?
train plane ship

12. Which color do you like best?
red yellow blue

13. Do you like to play with children who are:
smarter than you same not as smart as you?

14. How many times a month do you go to the library?

15. Which stories do you like?
real make-believe

16. Which would you read about?
animals people

17. If you were doing your school work, who would help you?
Smart Sally nobody Dumb Danny

18. Which would you like to read about?
giants rockets horses

19. Which would you do?
movies play cards go bowling

20. Who would you like to be?
a truck driver a teacher a doctor

21. Which would you rather have?
pretty clothes nice home new car

After presenting each situation, the teacher places the three picture cards on the floor. Each child makes his decision, then places his name card on the appropriate picture card. The teacher collects the picture and name cards after each decision situation. These may be used to make an interest profile for each student.

Ways to Measure: There are no right or wrong answers in this acitivity. The teacher may observe each child's responses in gaining insight as to his interests and decision making abilities, etc.

ME AND OTHERS

Title: My Family

Social Studies Concepts Developed:
An awareness of the family unit and differences that may exist among various units

Readiness Concepts Developed:
1. Awareness of concepts - mother, brother, pet, etc.
2. Listening and speaking skills
(using puppets - role playing)
3. Manipulative - coloring finger puppets

Objectives:
1. The student will construct his own family.
2. The student demonstrates various roles of each family member.

Materials Needed: Empty toilet paper rolls (for finger puppets)

Procedure: This activity may be extended over a period of days. The empty toilet paper rolls are to be used as family members. Each child is to create his own family situation. Before he begins, the teacher discusses family members - some families have a mother, child, pet - some have father, 2 children, etc. Children color faces, clothes, etc. on members of their families. Each child takes a turn role playing family members (using the finger puppets in allowing each family member to introduce himself).

Ways to Measure: Teacher observation of each child's ability to recognize and demonstrate roles of individual family members.

Title: The Interview

Social Studies Concepts Developed:
Interpersonal skills (awareness and relating to others, taking turns)

Readiness Concepts Developed:
1. Speaking skills
2. Understanding of the concept "interview"

Objective: The student will get to know others by conducting informal interviews.

Materials Needed: Chairs, record player, record

Procedure: This activity is played like musical chairs, only there are enough chairs for everyone and they are arranged in pairs in various parts of the room. The music is played as the children skip around the room. When the music stops each child is to find someone different to "get to know". Explain what an interview is and several questions they may want to ask each other - favorite food, favorite T.V. show, etc.

Evaluation: Teacher made checklist of teacher's observation of each child's speaking skills, ability to converse with others in an informal interview, and ability to get along and take turns with others.

Title: Farm Animals, Zoo Animals, Pets

Social Studies Concepts Developed:
1. Awareness of animals
2. Categorizing

Readiness Concepts Developed:

1. Speaking, listening skills
2. Differentiating

Objective:

1. Each student will describe animal picture cards.
2. Each student will categorize his animal picture card as farm animal, zoo animal, or pet.

Mateials Needed: Picture cards of farm animals, zoo animals, and pets

Procedure: This study can be extended over a period of time. While displaying picture cards, explain farm animals, zoo animals, etc. Each child is given a picture card. The picture cards are to be categorized as farm animal, zoo animal, pet (in some cases both). Have children talk about animals, etc.

Ways to Measure: Teacher-made checklist of teacher's observation of each student's ability to relay information about and categorize farm animals, zoo animals, and pets.

Title: Oscar the Owl

Social Studies Concepts Developed:
Awareness of animals (owl) (relationship to others)

Readiness Concepts Developed:

1. Speaking skills
2. Listening skills
3. Association of spoken work and written word
4. Concept attainment
5. Manipulative skills (folding, coloring, etc.)

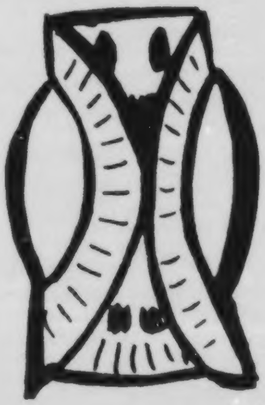
Objective:

1. The student will recite and act out a story finger play.
2. The student will recognize a written word as being associated with a spoken word.
3. The student will demonstrate an understanding of concepts as ruffled, curled, pointed, round, by acting these out or by coloring these concepts on their owls.

Materials Needed: Verbal story fingerplay of Oscar the Owl, paper plates, crayons

Procedures: Verbal story fingerplay (Act out the actions.)

Who, who, who
Who are you?
I'm Oscar Owl
how do you do?
I have ruffled feathers
and a pointed nose,
big round eyes and
curled up toes.



I sleep all day, stay
awake all night
Up in the tree with
the moon shining bright.

The teacher talks about owls. The teacher and students recite story fingerplay. The teacher emphasizes that a spoken word is represented in written form, also. The teacher explains the meanings of several words - ruffled, pointed, curled, bright, etc. (vocabulary development). The students then make their own owls from a paper plate. The left and right sides of the inside circle of the paper plate are cut. Then the left side of the plate is folded to the center, then the right side is folded to the center and stapled. The students then color the owl's ruffled feathers, pointed nose, big, round eyes, etc.

Evaluation: Teacher-made checklist of teacher's observation of each child's ability to recite and act out the fingerplay.

Title: I Can Not See But I Can Hear. (handicapped)

Social Studies Concepts Developed:

1. Acceptance of others abilities, disabilities
2. Awareness of the handicapping condition of blindness
3. Acceptance of the abilities and disabilities of being blind

Readiness Concepts Developed:

1. Auditory discrimination
2. Speaking skills

Objective:

1. The child will discuss things blind people can do well and things blind people can not do well.
2. Using auditory discriminatory skills the blindfolded child will identify certain sounds.

Materials: Certain sounds - sharpening a pencil, etc.

Procedure: Discuss the fact that each of us is different from the rest. It is acceptable to be different. Each person has something he does best, though it may not be what you do best. Some play baseball better, some color better, etc. Some children can hear, see, speak well. Some children can not see, but they can do other things well. A person who can not see is said to be blind. Have students close their eyes to see what it feel like to be blind. Discuss how this feels. Play a game where students put their heads down, close their eyes, and identify certain sounds that you make in the room (shutting the door, sharpening a pencil, dropping a book, etc.) Students rely on auditory discrimination skills in identifying the sounds. Point out the fact that blind persons usually develop an acute sense of hearing and can function well with others. Remind children they must remember to speak clearly when around others who are blind. Discuss things a blind person would be able to do well (dance, etc.); things a blind person may not be able to do well (read, unless it is Braille).

Similar activities can be done for other handicapping conditions. (deaf, retarded, crippled, etc.) Emphasize things the handicapped person can do.

Evaluation: Teacher observation of each student's ability to identify handicapping conditions and positive traits associated with those respective conditions.

Title: Alice's Restaurant

Social Studies Concepts Developed:

1. Cultural pluralism - awareness plus acceptance of different ethnic groups
2. Career awareness - jobs and responsibilities in operating a restaurant
3. Interdependence of a working unit
4. Importance of individual contributions toward the benefit of the whole

Readiness Concepts Developed:

1. Listening, speaking skills
2. Noting likenesses and differences
3. Visual discrimination
4. Concept attainment - restaurant, waitress, interior decorator, hostess, etc.

Objectives:

1. The student will name various ethnic groups and important contributions of each.
2. The student will identify various occupations and responsibilities entailed in operation of a restaurant.
3. By playing the game, Alice's Restaurant, the student will recognize the importance of all ethnic groups working together for the benefit of the whole.

Materials Needed: Various pictures, books, etc. of different ethnic groups.
Pictures of:
Ms. Van Chu, a Vietnamese waitress
Mr. Jones, a Caucasian busboy
Mr. Wong, a Chinese cook
Mr. Gondelini, an Italian beverage distributor
Mr. Nelson, a Negro interior decorator
Mr. Ortega, a Spanish advertising manager
Ms. Neimeyer, a German menu maker
Mr. Delany, an Irish meat distributor
Ms. Gibson, an Indian hostess

Procedure: This activity may be extended over a period of days. First, familiarize children with different ethnic groups - show pictures, storybooks, etc., explaining how these people came to the United States to live. Note likenesses and differences, etc. Point out that in the United States we all work together - each person makes a different contribution.

The teacher stresses the importance of all working together for the benefit of the whole. The teacher provides examples of all those who contribute to the operation of the school - custodians, principal, secretary, cafeteria workers, etc.

The teacher then explains how this also relates to other working situations, a restaurant, for example. She then lists all occupations involved in the operation of a restaurant, stressing the importance of each: waitress, busboy, cook, beverage distributor, interior decorator, advertising manager, menu maker, meat distributor, hostess, etc. (Show pictures.)

Students will then participate in a game, Alice's Restaurant. The game is played with Cover All Bingo. Each student receives a bingo card with 9 restaurant occupations written in the squares. The teacher then draws a card, reads the description of a worker. The students identify that worker. The teacher displays the word, and students cover the word on their cards (if they have it). Some cards may say..."The waitress did not come to work today. There was no one to take orders. Customers left the restaurant unhappy; therefore, the restaurant lost business today." In this case, all players who have the word "waitress" covered on their game boards, must remove the marker. The winner is the first one who has all restaurant workers "covered", signifying that all workers must work together for the benefit of the entire restaurant. Pictures of workers may be used if children are not yet reading.

Evaluation: Teacher observation of each student's ability to identify pictures of different ethnic groups. Teacher observation of each student's ability in demonstrating the importance of all ethnic groups working together for the benefit of the whole. Teacher observation of each student's ability to match/read words and/or pictures.

Title: Sharing

Social Studies Concepts Developed:

1. Interpersonal skills (sharing ideas)
2. Taking turns
3. Responsibility

Readiness Concepts Developed:

1. Appreciation of books
2. Taking care of books
3. Speaking skills, listening skills

Objective: The student demonstrates how to relate, take turns, how to be responsible for and appreciative of books by sharing a book with another child.

Materials Needed: Picture books

Procedure: The teacher talks about books. Displaying a book, the teacher demonstrates how to look at pictures, talks about what is happening in the pictures, and demonstrates how to properly turn the pages, etc. Half of the children are asked to select a picture book to share with one other child. The children are paired to share their books. The children take turns talking about each page. They also take turns turning the pages, etc. Afterwards, each pair must return the picture book to the bookshelf.

Evaluation: Teacher-made checklist of teacher's observation of each child's ability to relate, share, and take care of his picture book.

Title: Sometimes I Work By Myself; Sometimes I Work With Others

Social Studies Concepts Developed:

1. Interpersonal skills (working and playing alone)
2. Interpersonal skills (working and playing with others)

Readiness Concepts Developed:
Understanding of - alone, by myself, individually--group work, working with others

Objective:

1. The student will identify situations as being done alone or in groups
2. The student will perform specific individual activities and specific group activities

Materials Needed: Pictures of various situations of people working and playing alone and in groups.

Procedure: The teacher explains that sometimes we do things alone, by ourself and sometimes we do things with others in groups. Sometimes it is good to work alone; sometimes it is good to work with others. The teacher presents several situations (with or without pictures) - A girl brushing her teeth, two boys playing ball, etc. The children decide if the situation is alone or with a group. Present situations as: If I were paddling a canoe, would this be done better alone or in a group? (group) - Have children tell why some situations are done better in a group - cleaning the room, etc.

Provide situations within the classroom where students work alone and in groups - Time to do your coloring. Let's do this alone, all by yourself, Why? Time to play Red Rover. Let's do this in a group. Why?

Evaluation: Teacher-made checklist of teachers' observation of each child's ability to identify group or individual activities, each child's ability to work independently and in groups.

Title: "I'm Behind Tom but In Front of Sue!

Social Studies Concepts Developed:

1. Interpersonal skills (getting along with others)
2. Taking turns

Readiness Concepts Developed:

1. Understanding of concepts such as behind, in front of, between, first, last, beginning, end, middle
2. Following oral directions

Objectives:

1. Listening to oral directions the student will stand in the appropriate position as stated by the direction.
2. The student will line up in an orderly manner.

Materials Needed: None

Procedure: This activity may be extended for days. The teacher stresses the importance of getting along with others, taking turns, etc. and what will happen if we push, shove, etc. She then demonstrates by using children's bodies the meanings of the concepts last, first, between, etc., pointing out that it can be fun to be last (You get to look at others, etc.); it can be fun to be in the middle, etc.; we must take turns and try new positions.

The teacher then informs the class that they are going to "line up" by listening to directions - Sue, stand behind Tom, Bob, in front of Jim, etc. Have them realize how important they feel being in between, etc. Note the importance of lining up in an orderly fashion. Do this several times varying directions. Then have the students line up on their own, without following directions. Ask them who they are in front of, between, etc. Remind them to take turns being first and last.

Evaluation: Teacher-made checklist of teacher's observation of each child's ability to stand in the appropriate position (behind, etc.) given, ability to take turns, etc.

Title: What Would You Do? (emotions, feelings)

Social Studies Concepts Developed:

1. Self awareness (emotions)
2. Interpersonal skills (getting along with others, accepting others' opinions, taking turns, sharing ideas)

Readiness Skills Developed:

1. Speaking skills
2. Understanding concepts - feelings embarrassed, shy, angry, hurt, etc.

Objectives:

1. Given a specific situation, each child will express his feelings about the situation and how he would cope with the situation.

2. The student will listen to alternative methods of coping in various situations.

Materials Needed: Situations which evoke awareness of emotions

Procedure: This activity may be extended over a period of days.

Situation Game On Feelings
(self awareness, valuing, coping with individual differences)
Name as many feelings as you can think of.
Discuss the fact that feelings are good; we all have feelings. Certain feelings must be handled appropriately. Provide certain situations. In small groups, let children discuss how they would handle their emotions in these various situations.

Situations on Analyzing and Coping with Emotions.

1. You gave your worksheet to your teacher. It is wrong. The teacher corrects it. How do you feel? What would you do?
2. Your baby sister has torn up your favorite toy. How do you feel? What would you do?
3. Dad is taking you to the circus. You have been waiting all week. Dad calls and says he must work over time. How do you feel? What would you do?
4. Your pet dog has been hit by a car. He does not live. You must bury him in the back yard. How do you feel? What would you do?
5. It is your brother's birthday. Lots of friends and relatives come over. They bring presents. Your brother is getting lots of attention. How do you feel? What would you do?
6. Your friends are choosing sides to play a game. You are the last one chosen. How do you feel? What would you do?
7. Your are playing softball. A ball is hit to you. You catch it and throw the ball to first base. The runner is out. How do you feel? What would you do?
8. You are going home after school. You ask Jan to come over. She has to go to town with her mother. You ask Ruth to come over. She has to babysit. How do you feel? What would you do?
9. How would you feel if your brother or sister were teasing you and calling you names? What would you do?

Evaluation: There are no right or wrong answers to these situations. Each child should feel free to express how he would feel and what he would do in each situation. By allowing each child to express one will become aware of the alternative methods of coping with the emotion. The teacher "guides" toward a more acceptable method of handling the situation.

Title: What If A Beautician Didn't Finish The Job?

Social Studies Concepts Developed:

1. Awareness of traits necessary in developing effective social skills: cooperation, completion of task, being on time, etc.

2. Awareness of traits necessary in performance of jobs
3. Understanding of cause and effect

Readiness Concepts Developed:

1. Listening skills
2. Speaking skills
3. Cause and effect

Objectives:

1. The student will name skills needed in getting along with others - finishing our work, being on time.
2. The student will discuss things that may happen if people did not have these traits.
3. Given "what if" situations, the student will match the situation with its corresponding "effect" situation.

Materials: The teacher will construct cards of cause and effect situations -- What would happen if a painter did not finish painting a house - a corresponding picture card of a half painted house, etc.

Procedure: This activity can be extended over a period of days.

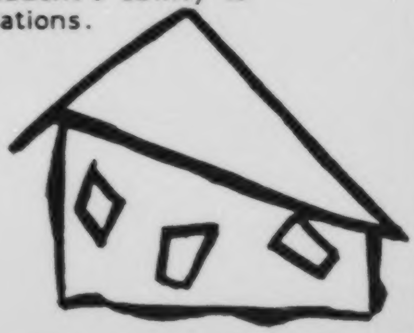
The teacher and students will discuss several traits which are necessary in most job situations: cooperation, completion of tasks, punctuality, responsibility, pride in quality work, production of quality products, interdependence, getting along with others, ability to adhere to rules, ability to reach group decisions, willingness to work, etc. Why is it necessary for a construction worker to have these? The teacher then discusses several situations and effects of those situations: What would happen if a beautician didn't finish the job, etc.

Students will participate in a game of cause and effect situations related to skills needed in job situations. Students will match a cause situation with its corresponding effect situation. The game will be played with Memory. All cards will be placed facedown. A student will draw a card labeled "What If?" The teacher reads the opposite side (What if a carpenter wasn't proud of his work?), then the child will match that card with its corresponding "effect" card - the house may be lopsided, etc. (Pictures are drawn on the cards.) What if the custodian didn't clean up the classroom? - the student will match this situation with a card having the picture of a messy classroom. While the game is being played the teacher stresses the importance of finishing our work, being on time, getting along with others, etc., not only in job situations but also at school, home, play, etc.

Evaluation: Teacher observation of each student's ability to name skills necessary in developing effective interpersonal relationships. Teacher observation of student's ability to correctly match cause and effect situations.

What if...
a carpenter
was not proud
of his work?

He would build
a lopsided
house.



ME AND MY NEIGHBORHOOD

Title: Yours, Mine, and Ours

Social Studies Concepts Developed:
interpersonal skills - respect for others, belongings, etc.

Readiness Concepts Developed:

1. understanding of the terms - own, belongings, property, respect, yours, mine, ours
2. understanding of possession and ownership

Objective:

1. The students will identify certain items as yours, mine, or ours.
2. The students will identify responsibilities associated with the care of each.

Materials Needed: Various pictures depicting neighborhood scenes - school, park, etc.

Procedure: The teacher begins by explaining the term property. Give examples of property within a neighborhood - yard, house, car, swing set, carport (pictures). Talk about taking care, etc. Have students name property that belongs to them, stressing - This is my pencil; it is mine. Provide examples of possession - This is Tom's book. This is Rita's pencil, etc. This is our classroom, our school. Have students hold up something that is mine. Have students identify something that beongs to their friend - This is yours. Display pictures which everyone may own - ours - classroom crayons, park, our school.

Evaluation: Teacher observation of each student's ability to identify items as yours, mine, or ours and note specific responsibilities associated with each.

Title: Neighborhood "Noises"

Social Studies Concepts Developed:

1. Speaking skills (communicating)
2. Listening skills
3. Organizing thoughts

Objectives:

1. The student will name things necessary in reporting a fire, etc.
2. Given specific neighborhood situations the student will communicate accordingly in that particular situation.

Materials Needed: Specific "neighborhood" situations which evoke communication.

Procedure: The teacher will discuss one's neighborhood and various people within - the groceryman, the policeman, the fireman, etc. The teacher stresses the importance of being able to communicate with others within the neighborhood. The teacher reviews rules necessary in reporting a fire ordering from a catalogue etc. (Speak plainly, give necessary information, etc.) The teacher "constructs" several neighborhood situations on cards. The child draws a card; the teacher reads the situation, and the child "communicates" accordingly. Several neighborhood situations may be:

1. You are lost. You find a policeman. What would you tell him? (address, etc.)
2. You must buy groceries for mother. What do you say to the groceryman?
3. Your neighbor's house is on fire. What do you tell the fireman?
4. Someone telephones for your mother. She is not home. What do you say?
5. The paperboy comes to collect. What do you say when you answer the door?

Evaluation: Teacher's observation of each child's ability to communicate in various situations. (speaking clearly and relaying necessary information)

Title: My School

Social Studies Concepts Developed:

1. Career awareness - understanding that everyone's job makes a contribution to the functioning of the whole
2. Listening, speaking skills
3. Understanding of terms (custodian, cafeteria worker, secretary, etc.) - concept attainment

Objectives: After a job description has been read, the student will identify the person who holds that particular job. (principal, secretary, etc.)

Materials Needed: Picture cards of persons responsible for the operation of a school (custodian, principal, etc.)

Procedure:

1. The teacher stresses the importance of all working together for the benefit of the whole. The teacher provides examples of all those who contribute to the operation of the school - custodians, principal, secretary, cafeteria workers, etc.
2. Students will then participate in a game, My School. The game is played by each of eight students being given a card with a picture of a person who occupies a job at their school. The teacher will then read out a description of one of the jobs. After hearing the description, the students decide what job is being described. After a correct decision has been made the student holding the card with a picture of that occupation will turn his card over. On back there will be a letter. After all cards have been turned over the cards will read out: My School.

3. After the class sees what the cards spell, the teacher will explain that it took all of the cards to spell out My School. The teacher should further explain that this is the same, in that it takes all of the jobs named to insure proper and smooth running of their school.

Evaluation: Teacher observation of each student's ability to match a person with the description of his job.

Title: Floor Map (My City)

Social Studies Concepts Developed:

1. Beginning map skills, directions
2. Awareness of constituents of a community

Readiness Concepts Developed:

1. Understanding of terms as map, community, city, library, park
2. Giving oral directions
3. Manipulative skills (cutting, painting, etc.)

Objectives:

1. The student will construct a floor map of his city.
2. The student will give oral directions to get from one place to another within the city.

Materials Needed: Cardboard boxes, soap boxes, shoe boxes, empty toilet paper rolls, butcher paper, paint, crayons, etc. to make a floor map of a city.

Procedure: After talking about your city (park, police station, main streets, stores, etc.) for several days, the class will make a map of the city. Explain what a map is. Explain city, community. After the boxes, etc. have been painted, the teacher will help children label buildings, main streets, places. The map can be used in several ways:

Children may give directions to get from the post office to the library, etc.

Evaluation: Teacher observation of each student's social skills (working with others, etc.), manipulative skills while constructing the floor map, and each student's ability in giving oral directions to get from one place to another. (checklist format)

ME AND MY COMMUNITY

Title: A Carpenter Needs A Hammer (Worker Bingo)

Social Studies Concepts Developed:

1. Awareness of various jobs within the community
2. Awareness of beginning competencies needed in various careers

Readiness Concepts Developed:

1. Visual discrimination of "tool" cards
2. Categorizing workers with "tools" used

Objective: The student matches "tool" picture card with the corresponding "worker".

Materials Needed: Make bingo cards by cutting various pictures of workers (secretary, truck driver, etc.) from magazines and pasting them on a piece of cardboard. Next make several flash cards of various tools (blow dryer, truck, typewriter, etc.) used in various jobs. The teacher should have one set of flash cards with "tool" pictures, and each child should have one set of smaller "tool" picture cards.

Procedure: Discuss various jobs and the tools used in these job situations, along with the skills needed. For example, a waiter needs to have tools as a pen and pad of paper. Skills needed in his job are: being able to write quickly and legibly, being able to think quickly. Each child is given a bingo card with pictures of various workers on it - discuss. Each child is given a set of "tool" cards. The teacher holds up one tool card and discusses. The child finds his corresponding tool card and places it on the appropriate worker picture. (A hair dryer would be placed on a beautician's picture.)

Evaluation: Teacher observation of each student's ability to find appropriate "tool" card and to match it with the particular worker who uses this tool.

Title: The Butterfly Factory Assembly Line

Social Studies Concepts Developed:

1. Interpersonal skills - cooperation, completion of task
2. Contribution of individuals to the functioning of the whole
3. Awareness of community elements - factory, assembly line operations, etc.
4. Problem solving analyzing, etc.
5. Importance of having rules

Readiness Concepts Developed:

1. Listening, speaking skills
2. Working individually and in groups
3. Understanding of the concepts - factory, assembly line, manufacture
4. Manipulative skills (tracing, cutting, bending, folding)

Objectives:

1. The student will name examples of factories and assembly lines.
2. Each student will complete an individual task towards completion of a group project.

Materials Needed: Pipe cleaners, construction paper, butterfly wing pattern, colored tissue paper, clothes pin, scissors, crayons. It is suggested that a teacher assistant be present with each group during this activity or work with one group of six children at a time.

Procedure:

1. The teacher will develop the concept of an assembly line. Teacher and students will name several assembly line situations: automobile factories, toy factories, doughnut factories, etc.

Jobs and Job Description

Antenna Maker - one who molds pipe cleaners into butterfly antennae.

Wing Tracer - one who traces the butterfly wing pattern onto the tissue paper.

Wing Cutter - one who cuts tissue paper butterfly wings.

Body Painter - one who colors designs on the clothespin butterfly body.

Butterfly Assembler - one who puts antennae, clothespin, wings together to make the finished "butterfly" product.

Butterfly Foreman - one who organizes and oversees the entire production.

2. The teacher divides the class into groups of six. The teacher presents each group with the above mentioned materials (about 20 of each item). The teacher displays the finished "butterfly" product and announces that as members of the Butterfly Factory they must produce:
   a) quality butterflies
   b) numerous butterflies (more butterflies than the other butterflies)

   The teacher does not inform groups of the various job roles necessary in the production of the butterfly. Each group begins work. After 15 minutes, the teacher stops the groups to see which group has progressed and why. Hopefully, one group has found that if labor is divided into specific job tasks, more butterflies are of a better quality than before. The groups then discuss and designate specific job tasks and continue production.

3. The teacher and class discuss what has taken place, the importance of each job task, importance of being able to adhere to rules, etc.

Evaluation: Teacher-made checklist of teacher's observation of each child's ability to complete individual tasks and work cooperatively in groups toward the completion of a project in developing the concepts - factory, assembly line, manufacture.

Title: Butter Does Not Grow On Trees

Social Studies Concepts Developed:

1. Beginning economic awareness
2. Production, distribution, consumerism

Readiness Concepts Developed:

1. Listening and speaking skills
2. Concept attainment of dairy, churn, production, distributor, consumer, buy
3. Ordering - first, second, next, last, etc.

Objective:

1. The student will identify pictures (dairy, distributor, churn, etc.).
2. The student will place the pictures in order as to which takes place first, next, etc. in the production and distribution of butter.

Materials Needed: Pictures of a farm, dairy, butter, cows, cows being milked, churn, butter, mold, grocery, cakes, pies, cookies

Procedure: This activity may be extended over a period of days. The teacher displays a picture of butter - names various brands, what you use butter with, etc. Then the questions are asked: "Where does butter come from?" - grocery store - "How does the grocery receive it? - man in a truck (distributor) - "Where does he get it?" - dairy - cows, etc. Explain the process of making butter using pictures, filmstrip, etc. Hand out pictures - distributor, dairy, etc. One at a time the students will place the pictures in order as to what happens first, second, next in the process.

Evaluation: Teacher observation of each student's ability to identify pictures and place them in order in the process of production and distribution of butter.

Title: Coupons

Social Studies Concepts Developed:
Beginning skills in understanding economics, consumerism

Readiness Concepts Developed:

1. Understanding of terms: coupon, more, less, save, sale
2. Speaking and listening skills
3. Context picture clues for vocabulary building

Objectives:

1. The student states how much money is saved by using a particular coupon.
2. The student locates other coupons in magazines.

Materials Needed: Magazines, flyers, catalogs with coupons. The teacher clips coupons from these and pastes them on flash cards. Write the name of the item under its picture.

Procedure: The teacher holds a coupon and explains what it is , how much it is for. The children are asked, "How much will you save?" Coupons make items cost less, etc. Items on sale cost less.

Evaluation: Teacher observation of each student's ability to locate a coupon and to state how much is saved by using the particular coupon.

Title: More Expensive, Less Expensive

Social Studies Concepts Developed:

1. Basic skills in economics, consumerism
2. Understanding of labor and products that "go into the making" of a finished product.

Readiness Concepts Developed:

1. Understanding of more, less, value, expensive
2. Speaking skills

Objective: Given two items of extreme difference in value, the student will state which item costs less and which item costs more.

Materials Needed: Magazines, flyer, catalogs. The teacher cuts pictures of cars, radios, T.V.s , etc. and pastes them on flash cards. The items are labeled under their pictures.

Procedure: The teacher holds two flash cards of extreme difference in value - a bag of candy and a T.V. The children are asked which costs more, which costs less. Why? (more time to make, labor involved more expensive to make, etc.) In groups of two the children can play the game by themselves, each child holding a flash card and deciding which is more expensive, etc. The game can be played like the card game Battle. The child with the more expensive card of the two is the winner.

Evaluation: Teacher observation of each student's ability to decide which item is more expensive or less expensive.

Title: A Computer Can Be Used for Work and Play!

Social Studies Concepts Developed:

Awareness of society's technological advances

Readiness Concepts Developed:

1. Understanding of terms - machine, work, enjoyment, computer, Atari, etc.
2. Speaking skills, skills in categorizing

Objectives:

1. The student will describe specific machines.
2. The student will categorize specific machines as machines used in work or machines used for enjoyment.

Materials Needed: Pictures of machines - sewing machine, television, radio, hedge trimmer, lawn mower, Pac Man video game, Atari, computer, telephone, etc. Magazines, sale pamphlets, etc. can be used. Mat the pictures on poster board and label.

Procedure: The teacher explains that we are surrounded by machines. Machines can be used for work or enjoyment. Machines help mankind. Hold pictures and discuss what each machine does. Where do you find these in the house, etc.? Give each child a picture card. On one board, label - machines for enjoyment. On another board label - machines for work. (Some can be both work and enjoyment.) Each child will discuss his machine and place it on the proper board.

Evaluation: Teacher observation of each student's ability to relay information about his specific machine and his ability to decide if the machine is used for work or enjoyment or both.

ME AND MY WORLD

Title: Day of the Week

Social Studies Concepts Developed:
Awareness of remote concepts of time and space - days of the week, calendar

Readiness Concepts Developed:
1. Listening, speaking skills
2. Dramatization
3. Language Experience Approach - awareness of spoken language as written words.

Objectives:
1. The student will compose a language experience chart on the days of the week.
2. The student will dramatize the experience chart.

Materials Needed: The "Mulberry Bush" song
The storybook, "The Very Hungry Caterpillar," by Eric Carle can be used as an introduction.

Procedure: The teacher talks about the days of the week and things that happen during the days of the week. Children can "make up" their own happenings for each day, and the teacher can record these on a language experience chart. The teacher and children then dramatize the experience chart to the tune, "Here We Go Around The Mulberry Bush."

Evaluation: Teacher observation of each child's ability to contribute to the experience chart and to dramatize its actions.

Title: Holidays - Columbus Day

Social Studies Concepts Developed:

1. Awareness of a day of special meaning within our society
2. Introduction to a globe - United States

Readiness Concepts Developed:

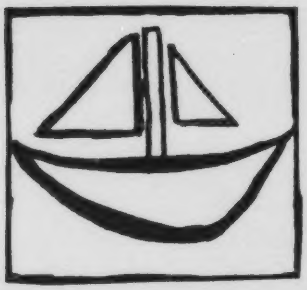
1. Association of spoken and written words
2. Understanding of concepts: sailed, ocean, United States, mates, sailors
3. Visual discrimination
4. Manipulative skills (cutting, pasting)
5. Dramatization

Objectives:

1. The student will recite and pantomine the Christopher Columbus story.
2. The student will visually discriminate several words within the story.
3. The student will construct a "Christopher Columbus" ship.

Materials Needed: Story of Christopher Columbus, construction paper, paper plates, glue, scissors

Procedure: Teacher writes this story on a chart:
Christopher Columbus was a brave man. He sailed the ocean to find a new land. In his big ship, he took a long trip. Then one day with his sailors and mates, he found this great land - the United States.



The teacher displays a globe and explains how Christopher Columbus sailed across the ocean to discover the United States (explaining meanings). The children and teacher then recite and act out the Christopher Columbus story noting written words for spoken words. Hold up a flash card, ocean. Have students locate that word on the story chart, etc. The students will then make a "Christopher Columbus" ship. The ship's hull is made from one half of a paper plate. All parts are pasted on a piece of construction paper.

Evaluation: Teacher observation of child's ability to recite the story, visually discriminate words, demonstrate understanding of concepts by pantomining the story, and construct his ship.

Title: Holidays - Halloween

Social Studies Concepts Developed:

Awareness of a day of special meaning and how it is celebrated in our society

Readiness Concepts Developed:

1. Association of spoken and written words
2. Understanding of concepts: scary, ghost, haunted, etc.

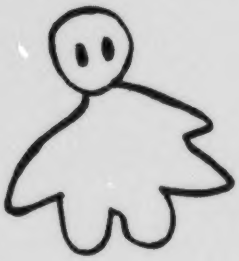
3. Visual discrimination
4. Dramatization
5. Manipulative skills (folding, tying, etc.)

Objectives:
1. The student will recite and pantomine the ghost story.
2. The student will visually discriminate several words within the story.
3. The student will make a ghost.

Materials Needed: Story about a ghost, Kleenex, yarn, wad of paper

Procedure: The teacher writes the following story on a chart:

Mr. Ghost is scary and white.
He comes out on Halloween night.
He looks like a sheet on your bed.
He looks like a cloud with a head.
In a haunted house, he does stay.
And scares the boys and girls away.



The teacher explains meanings of ghost, scary, cloud, haunted, etc. The teacher and students recite and act out the ghost story, noting written words for spoken words. The teacher holds flash cards - scary, ghost, haunted, etc. - for students to locate on the story chart. The students will then make their own ghost using Kleenex, yarn and wads of paper.

Evaluation: Teacher observation of child's ability to recite the story, visually discriminate words, demonstrate understanding of concepts by pantomining the story, and construct his/her ghost.

Title: Holidays - Thanksgiving

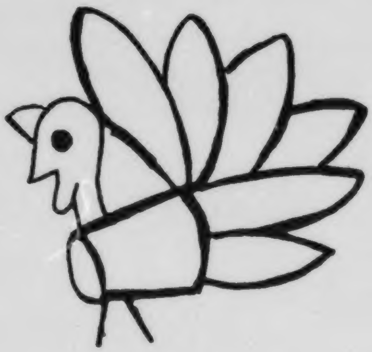
Social Studies Concepts Developed:
1. Awareness of a day of special meaning and how it is celebrated in our society
2. Introduction to - Pilgrims, Indians, etc.

Readiness Concepts Developed:
1. Association of spoken and written words
2. Understanding of concepts: feathers, struts, wobbles
3. Visual discrimination
4. Manipulative skills (cutting, pasting, etc.)
5. Dramatization

Objectives:
1. The student will recite and pantomine the turkey story.
2. The student will visually discriminate several words within the story.
3. The student will construct a turkey.

Materials Needed: Construction paper, small paper plate, styrofoam cup, toothpicks, glue, crayons.

Procedure: The teacher writes the following story on a chart:
Mr. Turkey's feathers are pretty and bright, as he struts through the forest from left to right.
He walks with a wobble and says gobble gobble.
Please don't get any thinner.
You'll make a good Thanksgiving dinner.



The teacher explains meanings of feathers, struts, wobble, thinner, etc. The students and teacher recite and act out the turkey story, noting written words for spoken words. The teacher holds flash cards - turkey, left, right, etc., for students to locate on the story chart. The students will make their own turkey using a small paper plate, styrofoam cup, glue, construction paper, crayons, toothpicks. Feathers are cut from construction paper and glued to a half of a small paper plate which is then glued to the styrofoam cup. The cup has a slit cut in top for the turkey's head (made from construction paper).

Evaluation: Teacher observation of child's ability to recite the story, visually discriminate words, demonstrate understanding of concepts by pantomining the story, and construct his turkey.

Title: Holidays - Christmas

Social Studies Concpets Developed:
Awareness of a day of special meaning and how it is celebrated in our society

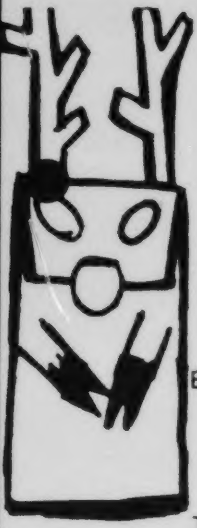
Readiness Concepts Developed:
1. Association of spoken and written words
2. Understanding of concepts: dark, beginning, ready, etc.
3. Visual discrimination
4. Dramatization
5. Manipulative skills (pasting, cutting)

Objectives:
1. The student will recite and pantomine the Rudolph story.
2. The student will visually discriminate several words within the story.
3. The student will make a Rudolph bag puppet.

Materials Needed: Story of Rudolph, paper sack, tagboard, construction paper, glue

Procedure: The teacher writes the following story on a chart:
It was the night before Christmas, Santa was ready to go.
It was very dark and beginning to snow.

Rudolph the reindeer, with his nose so red, will pull fat Santa and his toys and his sled.



The teacher explains meanings of ready, dark, beginning, red, fat, etc. The students and teacher recite and act out the Rudolph story, noting written words for spoken words. The teacher holds flash cards - ready, dark, etc. for students to locate on the story chart. The students will make their own Rudolph bag puppet using a paper sack, tagboard (for antler), construction paper, glue, etc.

Evaluation: Teacher observation of child's ability to recite the story, visually discriminate words, demonstrate understanding of concepts by pantomining the story, and construct his Rudolph puppet.

Title: Holidays - Valentine's Day

Social Studies Concepts Developed:

1. Awareness of a day of special meaning and how it is celebrated in our society
2. Awareness of other means of communicating - letters mail (post office), messages, telephone, newspaper, T.V. news report, raido, etc. - within our society.

Readiness Concepts Developed:

1. Understanding of message, letter, mail, news, newspaper, information
2. Classifying and categorizing
3. Manipulative skills (cutting, folding, pasting)

Objectives:

1. The student will categorize "communicating" situations as message, letter, radio, telephone, television, newspaper.
2. The student will make a valentine.

Materials Needed: Pictures of: letters, post office, a message (paper), newspaper, telephone, T.V. news reporter, radio, etc. - story of St. Valentine, construction paper, scissors, glue

Procedure: This activity can be extended over a period of days. The teacher explains that there are other means of communicating with others besides that of speaking - relate the story of Valentine and how he communicated through "messages." Give examples of messages, writing letters, looking at the newspaper, listening to the T.V. news as means of communication information. Use pictures as this is explained. Next play the game, "Let's Communicate". Have pictures of a letter (post office), telephone, message, newspaper, T.V. newsman available. Provide situations as:

1. Ms. Jones wants to borrow some books from Ms. Smith down the hall. How would she communicate? The child with the picture of the message, holds up his card.
2. You wish to let people know you have a bike for sale. How would you communicate this? The child with the

picture of the newspaper holds up his card, etc. Afterwards have students compose their own valentine as a means of "communicating".

Evaluation: Teacher observation of each child's ability to categorize "communicating" situations and his ability in communicating through a valentine.

Title: Holidays - Easter

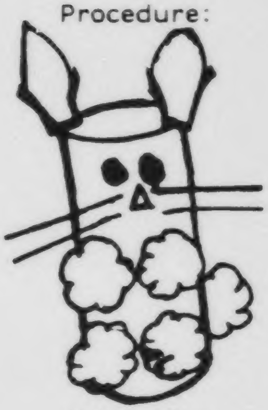
Social Studies Concepts Developed:
Awareness of a day of special meaning and how it is celebrated in our society

Readiness Concepts Developed:
1. Association of spoken and written words
2. Understanding of concepts: polkadots, stripes, etc.
3. Visual discrimination
4. Dramatization
5. Manipulative skills (folding, cutting, etc.)

Objectives:
1. The student will recite and pantomine the Easter story.
2. The student will visually discriminate several words within the story.
3. The student will construct an Easter bunny.

Materials Needed: Story of Easter, construction paper, toilet paper roll, glue, scissors

Procedure: The teacher writes the following story on a chart: Easter bunny's ears go flop, flop, flop. As he hides Easter eggs with a hop, hop, hop. Striped eggs, colored eggs, eggs with polka dots,
Hope on Easter morning I find lots and lots and lots!



The teacher explains meanings of striped Easter eggs, polkadots, flop, etc. The teacher and students recite and act out the Easter story, noting written words for spoken words. The teacher holds flash cards - colored, eggs, etc. for students to locate on the story chart. The students will then make their own Easter bunny using toilet paper rolls, construction paper, and cotton balls.

Evaluation: Teacher observation of child's ability to recite the story, visually discriminate words, demonstrate understanding of concepts by pantomining the story, and construct the rabbit.

Title: How to Get Places (transportation)

Social Studies Concepts Developed:
Decision-making, making judgements, generalizing

Readiness Concepts Developed:

1. Understanding of terms: travel, transportation, distance
2. Listening, speaking, categorizing skills

Objectives:

1. The student categorizes picture cards as to whether or not they are a means of transportation.
2. The student decides which means of transportation is appropriate in a given situation.

Materials Needed: Pictures of means of transportation - bike, car, train, airplane, boat, ship, wagon; pictures of items that are not means of transporation - chair, table, coat, bed, etc.

Procedure: This activity may be extended over time. The teacher explains the concept of transportation (ways by which we travel from one place to the other place). The children will categorize the cards as transportation or not transportation.

The teacher will hand out the transportation cards. The teacher will ask questions as:
Which can go the fastest?
Which would you use if you wanted to go a long distance?
Which can children use?
Which can adults use?
The child with the appropriate card stands as the questions are asked.

Evaluation: Teacher observation of each student's ability to categorize pictures as to whether or not they are means of transportation. Teacher observation of each student's ability to determine which type of travel is best in a given situation.

Title: Other Homes - Other Cities, But My State

Social Studies Concepts Developed:

1. Awareness of a larger environment - the remote, places removed from the kindergartener's world
2. Beginning map skills
3. Awareness of other homes (cities, etc.) within the state

Readiness Concepts Devleoped:

1. Understanding of terms: fish, cotton, forest, etc.
2. Manipulative skills - drawing coloring
3. Listening and speaking skills

Objectives:

1. Children will discuss characteristics of cities.
2. Children will draw and color cities (related characteristics as houses, etc., and different characteristics as industries, etc.).

Materials Needed: Large floor map of Mississippi (just the shape), pictures of cotton, catfish, chickens, boats, shrimp, forests, houses, buildings, etc.

Procedure: This activity can be extended over a period of days. The teacher discusses "where we live" - our address, our city, etc. The teacher explains that there are other cities like ours. Name some. Explain all these cities are part of a large place (home) - Mississippi. The teacher displays the shape of Mississippi and names some familiar cities and points out where they are located, what people in these cities do, etc. (In Biloxi people sunbathe, fish, ride boats, etc.; in Greenwood people grow cotton to make clothes, etc.; in Wiggins people grow trees for lumber to make furniture, etc.; in Belzoni people raise catfish for us to eat, etc; in Prentiss people raise chickens for us to eat, etc. The teacher draws a hugh room-sized floor map of Mississippi. Children are positioned on the map, at points where various cities are located. The teacher writes in the name of the city. The children then color pictures of what people do in that area, color houses, post office, fire station, etc.

Evaluation: Teacher observation of students' ability to discuss characteristics of cities. Teacher observation of students' ability to draw characteristics of cities.

The following is a story which can be adapted to classroom use in teaching young children about Mississippi. A classroom table cloth can be constructed using oilcloth and permanent magic markers.

THE MISSISSIPPI TABLECLOTH

W. Guy Henderson
Missionary, The Philippines

When we were growing up my papa found a big plastic map of Mississippi. Nothing would do but for him to use it for a tablecloth even though Mama maintained it was hard enough to live there without having to eat on it. Through the years it became a pattern that molded much of our table decor and culinary endeavors.

Automatically we knew the vase of flowers would go down around Pelahatchie. Since there were ten children to crowd in on the benches, I usually sat at Vicksburg. If company came I could be squeezed down as far as Natchez. However, this was much too close to the end of the table or along the Gulf Coast where papa sat. We laughingly told him he was sitting in the Gulf of Mexico but he declared as how the waters kept his feet cool and besides that he was fond of the scenery. Also, in this position he was able to keep an elbow on Picayune and another on Lucedale.

Mama always sat up in Tennessee, a position she preferred since her back would be toward the north. Papa reminded her that the war was over but Mama would only snort and continue to sit on Tennessee.

It helped too when the table was crowded. You could always say, "Here, set the beans in Hollandale" or "Please reach me the pie over near Ripley." It taught the younger children how to set the table correctly. I can still hear the older sister telling the young ones, "Now put the plate at Meridian, the fork just south of Quitman, and the spoon and knife up near Shaqualak."

Papa didn't believe in the first person singular so he would say, "Pascagoula needs the cornbread," or "Bay St. Louis is mighty dry." Mama wanted to change it come Thanksgiving but removing that map was akin to a revolution all over the southland. I was accused of being at Greenville instead of Vicksburg. Papa allowed as how he did not know if he were at Biloxi or New Orleans and that he would have cancelled Thanksgiving if he had known it would destroy the entire state. Moving that tablecloth map caused more confusion than the carpetbaggers' invasion. At supper that night I well remember how nice it was to see the linen folded away and in ceremonial quietness we spread the map. Vicksburg never looked so good.

Of course some cities messed things up som e thing fierce. Mama always kept the coffee on the stove even though we thought it would be quaint to keep it on Hot Coffee. We compromised by keeping the pickles at Mt. Olive and the fried chicken at Duck Hill. Uncle Sipes would come to visit and beg to sit at Pilgrim's Rest in Itawamba County.

Once I spilled a glass of milk at Raymond and it ran clear up to Tupelo and as far south as Tylertown. Papa declared it flooded twelve counties and said we should ask the government to declare it a disaster area. It was hard enough to lose the milk but to know I had brought disaster to so many people was frightening. I was afraid to go near Tupelo for weeks after that.

Through the years the map wore out but it didn't matter then. We had the places so memorized that I knew every county and county seat. My cousin from Louisiana came to visit and thought we were nuts. "Put these hot biscuits at Wiggins" or "Pass the pie to Biloxi" left him utterly confused. It really impressed him when we told him the map story and later reports had him drawing a map of Louisiana on his mother's best linen tablecloth.

Try it sometime. While this matter of teaching geography is not PTA approved, the demographic digestibility is entirely satisfactory and is guaranteed to give you a new appreciation for fine linen.

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Music

INTRODUCTION

Music is an experience that young children naturally enjoy. They don't have to be prodded into singing songs or moving to the beat of the music; they are generally always eager to participate. Music is a flexible experience that can fit any mood, any level of maturity or any size group. Many teachers of young children have found the value of using music to help children get rid of the "wiggles" that so often comes when children sit still too long. Because music is a motivating activity, it can enhance any occasion or most any area of the curriculum and turn it from an ordinary experience into a vivid one. Thus music can be used as a helpful aid in developing children's skills and abilities in all of the areas of the curriculum.

Although we can see several general benefits that might accrue from using music in the kindergarten classroom, can music really be used to help children develop in any specific way? Music can help children develop intellectually especially in reading readiness skills. By participating in music activities, children improve their listening skills and auditory discrimination skills. Children can refine their skills in oral communication and develop larger vocabularies as they sing songs. They learn to express their ideas in nonverbal ways through creative movement. Young children develop a keener sense of phrasing through music. Researchers tell us that this understanding of phrasing acquired through singing songs helps children learn to be smoother readers. By participating in music activities, children learn to follow directions; they develop memory, sequencing skills, understanding of whole-part relationships, and spatial awareness. Through discussions of the songs they sing, children can learn to tell the difference between fantasy and realism. These are but a few of the perceptual and intellectual skills that children acquire through music activities-skills so important for learning to read.

When children participate in music activities, they develop emotionally, also. Music is a natural mode for expressing, identifying, releasing, and relieving one's feelings. Being able to sing "mad songs" can help children release pent up emotions thereby maintaining an emotional balance. When children learn to express their feelings through music, they begin to understand their feelings more clearly. Positive experiences in music help the child develop a sense of security, self acceptance, and a positive self concept.

Music is quite often a social experience because children generally participate in music activities as a group. Thus music has a cohesive element that can unify a group. Each child can participate on his own level and still be a contributing member of the group. Participating in group activities teaches the child cooperation. Positive music experiences can lead children from self-acceptance to acceptance of others.

Many music activities call for various types of movement. Thus music experiences can help children develop large and small muscles and improve eye-hand and eye-foot coordination. These physical refinements are prerequisites for learning to read and write.

Because music is a creative art, many of the musical activities in which children participate should develop their creativity or their divergent thinking skills. Divergent thinking is one of the highest levels of intellectual thinking. Children can improve their creative thinking skills as they are given opportunities to express themselves in unique ways in movement, to create new words to songs, or sing new tunes.

The use of music can be a real asset to any kindergarten classroom. It can motivate children; it can extend new concepts; it can help children develop intellectually, emotionally, socially, physically and creatively. Most of all music is valuable because it enriches our lives and increases our sensitivity to the beauty around us.

CONCEPT LEARNING

Each of the different areas of the music curriculum is useful for teaching specific skills and concepts. This section contains a list of four areas of the music curriculum and some of the skills and concepts that teachers might utilize in each of these divisions. This is not a comprehensive list. The list is only a sample to illustrate the teaching potential in music. Applying ingenuity and taking advantage of the flexibility and the motivating power of music will promote the teaching of other concepts besides those listed below.

1. Songs and verses
    a. ability to listen
    b. ability to follow directions
    c. auditory discrimination (example: skill in matching different pitches and rhythms in songs and verses)
    d. development of a sense of phrasing
    e. sequencing skills
    f. memory skills
    g. whole-part relationships
    i. vocabulary development
    j. understanding the difference in realism and fantasy
    k. development of specific concepts such as addition, subtraction, numeral recognition, color recognition, understanding community helpers, etc. (Children learn best from direct contact with objects and from first hand experiences, but songs and verses related to these experiences help deepen the understanding of the concept being taught. For example, the children visit the Post Office, mail a letter, and receive a letter, and follow up their experiences with a song about the postman. Singing about their experiences help them clarify their understanding.)
    l. acquisition of knowledge about different cultures
    m. development of an appreciation of music

2. Rhythmic movement and use of rhythm instruments
    a. sense of phrasing
    b. eye-hand and eye-feet coordination
    c. large and small motor development
    d. auditory discrimination
    e. spatial awareness

    f. ability to listen
    g. ability to follow directions
    h. non-verbal communication

3. Creative movement
    a. ability to listen
    b. ability to follow directions
    c. nonverbal communication
    d. divergent thinking skills (Creative movement is a good way to develop this skill. The child listen to the music and interprets it by moving in his own unique way, or perhaps a child interprets nonverbally an idea not put to music. When teachers encourage their children to think and express their ideas divergently, they help children develop one of the highest levels of intellectual thinking.)

4. Listening
    a. ability to listen
    b. auditory discrimination (Children who learn to pick out high or low sounds, fast and slow beats or different instruments in the music will be able to discriminate between the sound of a "b" and "d" more easily when they learn to read.)
    c. whole-part relationships
    d. appreciation of many different types of music
    e. appreciation of the beauty in music

SELECTED VOCABULARY TO BE TAUGHT

1. high/low, fast/slow, loud/soft
2. directional words such as over/under, up/down, back/forth, backward/forward, sideways, between, underneath, below/above, the other way, in a circle
3. adverb such as quietly, softly, noisily, loudly, hurriedly, quickly, slowly, heavily, highly, happily, sadly
4. terms related to body movement such as jump, gallop, skip, hop, walk, run, tiptoe, kick, tap, bend, stomp, wiggle, pat, swing, reach, stretch, droop, run, wave, shake, clap, snap, roll, pull, push, hold, slap
5. the names of the different body parts that might be used in movement
6. color words
7. numbers
8. the names of various instruments in the orchestra or different instruments used in the kindergarten room
9. different vocabulary words related to specific songs and verses

INSTRUCTIONAL TECHNIQUES

Using Music to Build a Good Self Concept

If music is presented properly to young children, it can be an excellent concept builder. Rhythms, creative movement, using rhythm instruments and singing are usually so much fun that these activities often generate a warm, accepting atmosphere. Remember that music is one area of the curriculum where little emphasis should be placed on doing things "right" or "wrong". In this way each child's self image can be built. Many rhythms and songs have words which are excellent for building children's self concepts. Use these songs often. Learn to insert children's names in songs to enhance self concepts. For example for a song such as, "Whenever Mary Puts Her Green Dress On," substitute a name of a child in your classroom and an article of clothing that that child is wearing that day. You might sing instead, "Whenever Charlie puts his plaid shirt on". Then let Charlie stand while the children sing this song to him.

Teaching New Songs

In teaching new songs, remember you do not have to be a beautiful singer. Just because you are their teacher, children will think you are great anyway. The basic ingredient that is needed for singing songs with children is confidence. Confidence is gained the more you sing with children. You will find many good songs to use under the activities section that follow, but don't hesitate to use songs you already know. Change the words or the time of a song to fit your particular need. It is not necessary to use a piano, a guitar, or an auto harp to accompany children's songs. In fact it would be best not to use one all of the time because children can become dependent on an instrument for singing. Should a piano or other musical instrument not be available, request that the songs be played on an instrument and recorded. The cassette tape can then be used by teachers in the classroom situation.

Here are some simple techniques for teaching new songs to children.

-Find a catchy way to introduce the new song. A pictures might be used or the new song may be tied in with something that the children have experienced.
-Sing the song all the way through several times. Don't dissect the song and teach by sections unless it is unusually long.
-Encourage the children to sing it through several times.
-Drop the song before the children tire of it.
-Sing it again the next day. You should find that the children have improved after letting it rest for a day or so.

Pointers to Remember about Children's Singing

Don't encourage children to "sing louder." The quality of children's voices becomes very harsh when they sing loudly.
Remember that children participate in group singing at different levels of maturity. Allow each child to particpate at his own level of maturity.

1. At a lower level of maturity children will participate by just sitting and enjoying hearing the other children sing.
2. As they mature, they will add a few words, or a phrase that is repeated often, or a simple motion to a group song.
3. With increased maturity children will begin to sing the entire song.

Don't worry if children sing off pitch. Their ability to sing on pitch will improve as their auditory discrimination improves. Remember the goal is for children to enjoy music-not to make beautiful singers.

Techniques for Using Rhythmic and Creative Movement

Wait to introduce rhythmic and creative movement in the classroom until you have established a rapport with your children. Don't be discouraged if the first few times you try rhythmic and creative movement with children, you find them to be a bit rowdy. Anything new is often accompained by a great deal of excitement and enthusiasm; however, young children need experiences using large and small muscles and coordinating body parts in supervised activities, so don't give up. Little by little as you continue movement activities and if you insist on children's following basic rules for order, you will find that movement activities will become easier for you and the children. There are three basic rules to enforce when using movement activities. If you will be consistent about enforcing these rules, movement activities can be rewarding meaningful experiences.

Here are the rules:

-Do what the music says to do. (This rule assures that a child won't be galloping around the room when the music has a slow, smooth beat.)
-Your territory ends where somebody else's begin. (This rule establishes boundaries and keeps children from stepping on or hitting one another.)
-Freeze
(If children get too noisy during a movement activity, call out the word "Freeze." Children should know at the sound of that word to stop in mid air and become "frozen statues." After quietness has settled over the classroom, begin your activity again.)

Finding Space for Movement Activities

Many creative and rhythmic movement activities take space. Perhaps your room doesn't have an abundance of open territory. You might have to be ingenious to find enough space. You might look for a vacant room for movement activities. Maybe there is an auditorium in your school or a gym that you could use. Try movement activities out-of-doors. Use your own room and move the tables back to create some open spaces.

Using Props with Movement Activities

The use of props can enhance many creative and rhythmic movement activities. Many shy children especially enjoy using props because they feel that the focus is on the prop and not on them. Gather some of the props suggested below and incorporate them in your movement activities.

-large balls - to toss, bounce, or balance
-hula hoops (made from plastic tubing) - to spin, wave about, pass through, lift, or swing.
-ropes - to grasp and stretch, coil and spin, snake along the floor, or jump over.
-scarves, colorful wide ribbon from a florist, and bright colored crepe paper streamers.
-bells attached to flowing skirts, tied to wrist and ankles, or held and shaken.
-bean bags - to balance on the head, swing from hand to hand, toss.
-other props such as long sticks, feathers, parasoles, balloons, hats, or anything that suggests a movement or a mood.

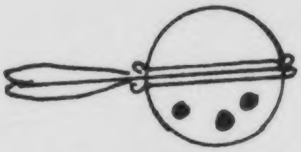
Using Rhythm Instruments:

You will want to use rhythm instruments with many of your rhythm activities. Children enjoy using rhythm instruments in both large and small group experiences. One rule that will help you keep the noise level at a minimum when instruments are not being used is the rule that follows: "Put your instrument to sleep when it is not being used." You can make simple rhythm instruments for classroom use quite inexpensively. The section that follows includes some basic ideas for making rhythm instruments.

Rhythm Instrument to Make:

Can-Can Shakers

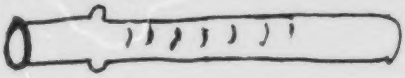
Materials: 2 kitchen strainers, adhesive tape, marbles.
Procedure: Put several marbles into the basket of two kitchen strainers. Tape the two strainers together.



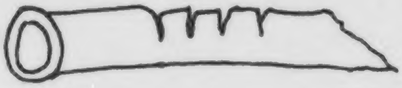
Bamboo Guiro

Materials: Bamboo sticks 12" long, coat hangers.
Procedure: Along 3/4 of the length of the surface of the bamboo, cut or file a row of grooves approximately 1/8" apart and 1/16" deep. Do not cut through the wall of the bamboo.

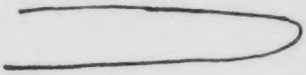
Top view



Side view



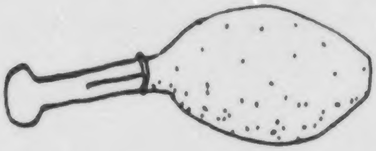
Bend a 1 foot piece of coat hanger in half. The children scrape this coat hanger over the ridges on the bamboo to make the sound.



coat hanger

Lemon Rattle

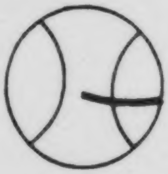
Materials: A plastic lemon, dry popcorn, old fashion clothes pin.
Procedure: Fill a plastic lemon or lime with dry popcorn. Stick a clothespin in the open end of the lemon to stop up the end and to use as a handle.



Tennis Ball Rattle

Materials: Old tennis ball, small pebbles

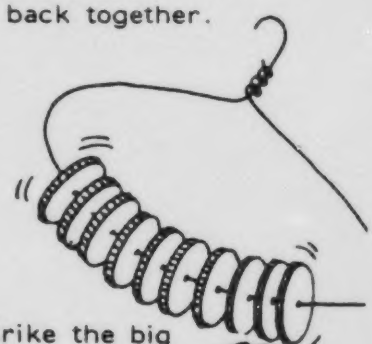
Procedure: Cut a small slit in the side of an old tennis ball. Fill the ball with small pebbles. The child may shake the rattle holding the ball in his hand or bounce the ball to the rhythm of the music.



Coat Hanger Jungle

Materials: 10 drink bottle tops, coat hanger

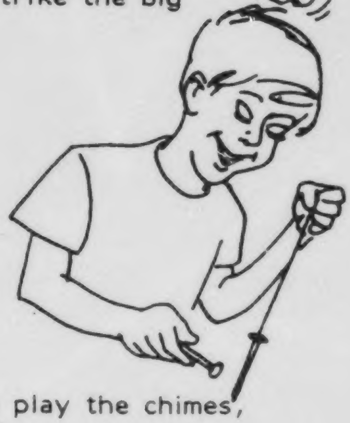
Procedure: Using a hammer and a big nail, punch holes in the center of ten drink bottle tops. Disconnect the ends of a coat hanger with pliers and bend it into a circle. Slide the bottle caps onto the coat hanger and bend the ends back together.



Nail Chimes #1

Materials: String, 2 big ten-penny nails.

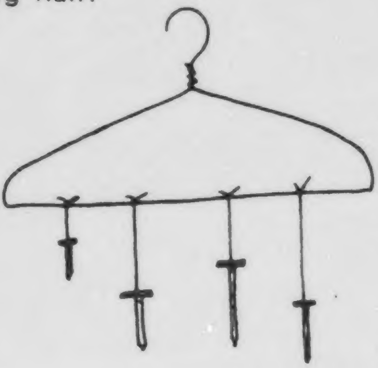
Procedure: Tie a string around a big ten-penny nail. Strike the big nail with another nail.



Nail Chimes #2

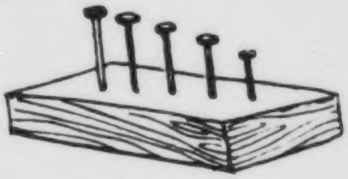
Materials: Coat hanger, string, several large nails.

Procedure: Tie several large nails to a coat hanger. To play the chimes, strike the hanging nails with another big nail.



Nail Xylophone

Materials: Small block of wood 1"-2"-thick, several different sizes of nails.
Procedure: Hammer several different sizes of large nails in a straight line into a small scrap of wood. To play the xylophone, run a large nail back and forth across the center of the nails.

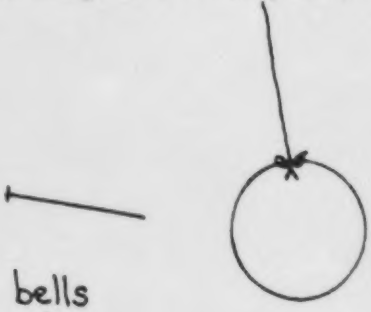


Drums

Materials: Coffee cans with plastic lids, spray paint.
Procedure: Remove plastic lids from cans. Paint the outside of the can a bright color. Place lid on the can when it is dry.

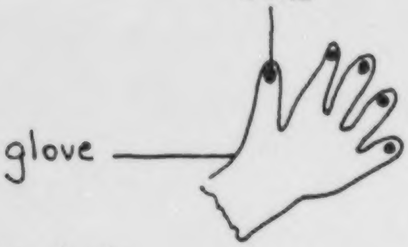
Circular "Triangles"

Materials: Steel harness rings, ten-penny nails, string.
Procedure: Purchase steel harness rings from a hardware store. Tie a string around each ring. Play the rings by striking with a ten-penny nail.



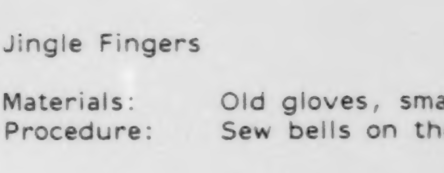
Jingle Fingers

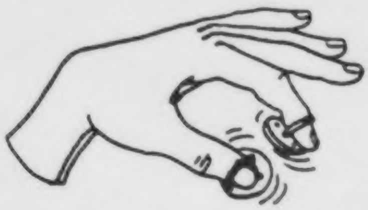
Materials: Old gloves, small bells
Procedure: Sew bells on the fingertips of gloves.



Finger Cymbals

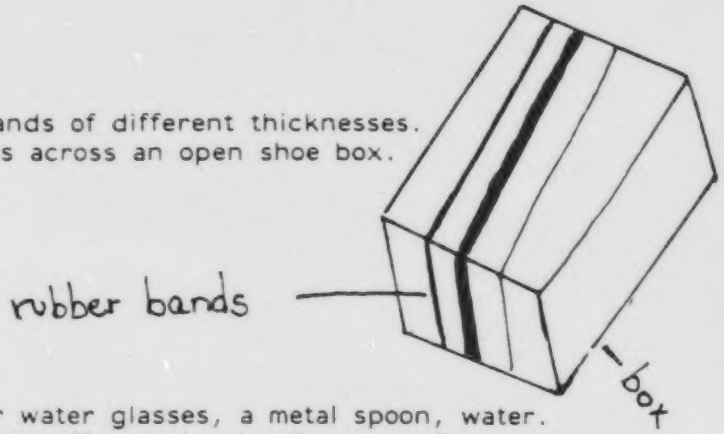
Materials: Drink bottle caps, narrow elastic.
Procedure: Flatten bottle caps with a hammer. Punch two holes in each bottle cap. Thread each cap with a loop of elastic or a small rubber band. To play, the child slides one cymbal on his thumb and one on his second finger. He then claps the two cymbals together. (Playing bottle cap cymbals is a good way to develop small motor control.)





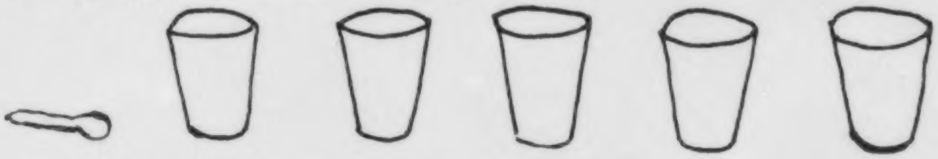
Shoe Box Banjo

Materials: Shoe box, rubber bands of different thicknesses.
Procedure: Stretch rubber bands across an open shoe box.



Water Glass Xylophone

Materials: Several glass jars or water glasses, a metal spoon, water.
Procedure: Fill water glasses with different levels of water. To play children strike the sides of the glasses.



Tambourine

Materials: 2 paper plates, hole punch, yarn, small bells, glue.
Procedure: Glue the rims of two paper plates together. When the glue is dry, punch holes at regular intervals around the plates. Lace yarn through the holes and add bells as you work around the rim.

Sandpaper Block

Materials: Medium sandpaper, 2 squares 4" x 4", two 4" pieces of 2" x 4" wood, glue.
Procedure: Glue sandpaper on blocks. Rub blocks together for an interesting sound.

Rhythm Sticks

Materials: 2 dowels, two inches in diameter, or broom handles 10-12" long

Shakers

Materials: Plastic medicine bottles, all sizes, soap bottles, 2 aluminum pie pans, film cans, tape, glue, tissue rolls, clam shells.
Procedure: Partially fill any of the above items with rice, rocks, nails, paper clips, beans, bottle caps, pennies, old beads or anything else that will create noise. Each makes a different sound. Glue the lids on the bottles.

Triangle

Materials: A short length of metal pipe or a horseshoe, string, a knife, fork, or spoon for a mallet.

Procedure: Use a piece of string 3 times the length of the pipe. Run the string through the pipe and tie the ends of the string together. Strike it with the mallet. If a horseshoe is used, tie only one end of the string to the curve of the horseshoe. You can then strike the horseshoe as it hangs from the string.

Rubber Hose

Materials: Old rubber hose

Procedure: Cut small pieces of an old rubber hose. Let children sing various songs through this hose. It changes the sound of their voice and can be fun. Compare sounds of long and short hose segments.

Source - Planning Guide to Preschool Curriculum p. 47.

Jingle Clogs

Materials: Coke bottle tops, six-inch sticks

Procedure: Nail pairs of bottle tops loosely to a six-inch stick. Make holes in bottle tops with a nail thicker than the one used to nail them to the stick.

Clapper Castanets

Materials: Bottle tops, stiff cardboard

Procedure: Glue two bottle tops to the insides of a folded stiff cardboard piece - the size of a large matchbox.

Paper Cup Shakers

Materials: Paper cups, rice, pebbles, tape

Procedure: Tape open ends of two sturdy paper cups together; use different "fill" inside each such shaker to make one louder and one softer (rice, pebbles). Just a small quantity makes a pleasant sound.

Drums

Materials: Oatmeal boxes, glue, tempera paint

Procedure: Take the wrappings off of the box. Glue the top back on. Paint the box using various colors and design as the child chooses.

Using Listening Activities in the Classroom

One of the major tasks of kindergarten teachers is helping young children develop good listening habits. Those habits form the basis for all learning. You will find that music activities involving listening can help children develop good listening habits. Use a variety of music listening activities. Allow children free time to listen to their favorite records. Have an inexpensive record player and tape recorder in the classroom for children. Give special small group instruction on how to use the record player and tape recorder. Let each child demonstrate to you that he/she knows how to use the equipment before you allow him/her to use it alone. Bring in various types of music and encourage the children to listen.

Music in Large and Small Group Settings

Be sure to provide musical activities in both large and small group settings. Each day you need to have a time set aside for large group music activities. During this music period include a variety of music experiences: singing, rhythms activities with and without rhythm instruments, creative movement, and listening activities. No music period is well rounded if the children just sing songs. Besides a large group music period, you also need a music center in the classroom where children can participate in music on their own individually or in small groups. The music center should include some of the following items:

-record player and/or tape recorder
-records and/or cassette tapes (see materials list for suggestions)
-rhythm instruments (for children to accompany the music as they listen)
-props for creative movement (see suggestions in this section)
-a xylophone (to give children opportunities to experiment playing and listening to an instrument that produces different pitches)

When to Have Music

We have already stated the importance of having a special time set aside each day for music in a large group setting and the need for a music table or music center where children can become involved in music activities during a free choice activity period. There are other times during the kindergarten day when you will find a song, a rhythm, or a creative movement activity to be very useful. The list below will give you some ideas of different times to use music in the classroom:

-when the children are tired
-when the children become restless
-when you need to change the classroom mood
-when you have a few extra minutes before going out of doors, before going home, or going to lunch
-to introduce a story
-to help teach a new concept
-to bring the children together
-to help make a smooth transition from one activity to another.

EXTENDING IDEAS:

The suggestions above give you a few techniques for making music a motivating learning experience in the classroom. Add your own personality to these suggestions. Experiment until you find a comfortable way to direct music activities - the best way for you and your children.

E. INSTRUCTIONAL MANAGEMENT

Art and music are two areas of the curriculum in which the child will receive many benefits that can not be stated in measurable terms. Some of these benefits are just as valuable as measurable ones. Nevertheless, you will need to be able to state at least one measurable objective for every music activity you use. To satisfy the requirements of writing objectives for every activity, use the following suggestions. State your objective simply, clearly, and precisely. State your objective in measurable terms. In other words, tell what the learner will be able to do. Notice that your objective should indicate what the student will learn - not what you, the teacher, will teach. If you are teaching a song, you might use some of the following phrases to state your objectives:

-to sing...
-to sing on pitch...
-to demonstrate an awareness of the difference in loud and soft tones by singing loudly or softly at appropriate places in a song
-to repeat a melody correctly

Some measurable objectives for creative and rhythmic movement might be:

-to demonstrate divergent thinking by moving to the music in a unique way
-to demonstrate the ability to express the difference in a happy mood and a sad mood through creative movement
-to repeat (by clapping) a rhythm given by the teacher
-to demonstrate an awareness of the change in the form of the music by dancing in a different way when the music changes.

For listening activities you might use these phrases to state your objectives:

-to describe the music verbally
-to identify different instruments by pretending to play them when they occur in the music
-to compare and contrast verbally two compositions
-to demonstrate an understanding in the difference in high and low pitches by moving the body from the high to low level in conjunction with the music

There are several ways to measure these objectives. The most obvious way is by observation. Other ways might be by verbal or manipulative responses to either the music itself or to questions about the music. Above all keep music objectives very simple. See the activities that follow for other examples of ways to state objectives.

F. GENERAL MATERIALS LIST

1. Rhythm instruments (drums, hand shakers cymbals, rhythm sticks) (See list for inexpensive ways to make rhythm instruments.)

2. Xylophone or tone bells

3. A variety of records or tapes. To include:

    a. simple children's songs
    b. instrumental records representing a variety of types of music such as classical, popular, etc.
    c. records of musical stories

4. Record player and/or cassette tape recorder

5. Props for creative movement (See suggestions in this section)

6. Autoharp (not essential)

7. Piano (not essential)

(See bibliography for suggestions of records.)

Action/Game Songs
Buffalo Gals
Busy
Cabin in the Wood
Head, Shoulders
If You're Happy
Open, Shut Them
Sit Down, Stand Up
Walk to School
Marching Song

Animals/Bugs/Insects/Birds, Songs About
Bumblebee
Caught a Rabbit
Eency, Weency Spider
Five Little Speckled Frogs
Goat, The
Green Frog
I Can't Spell "Hippopotamus"
Old Gray Cat, The
Robin, Robin Redbreast
Six Little Ducks
Thousand-Legged Worm, The
Two Little Chipmunks

Flowers/Vegetables/Seeds, Songs About
John the Rabbit
On Our Farm
  also: Vs. 2, Jack-in-the-Box

Home and Family, Citizenship, Songs About
All Night, All Day
Hush, Little Baby
Playmate
Singing Makes a Happy Home

Holiday Songs
Halloween Night
Witch Rides, The
I'm a Very Fine Turkey
Over the River
Ky-yi-yi-yi
There Were Five Great Big Indians
We Are the Red Men
Deck the Hall
Go Tell It on the Mountain
We Wish You A Merry Christmas
There's a Little Wheel
Valentine's Day

Numbers/Letters/Colors/Shapes Directions, Songs About
Numbers Are so Much Fun!
Alphabet Song
Pat-a-Cake
  also: I Can't Spell Hippopotamus
Color Game
Miss Mary Mack

Nursery Rhymes
Baa! Baa! Black Sheep
Hey, Diddle, Diddle
Hickory, Dickory, Dock

Openers/Happy Songs
Hello
Hello, Everybody
If I Teach You to Sing
Wake Me! Shake Me!

Patriotic/Provincial Songs
America
Cotton Needs a-Pickin'

Glory, Glory, Hallelujah!
Go, Mississippi!
Yankee Doodle

Scale Songs
Ebeneeze Sneezer
Jack-in-the-Box

Self-concept, Songs about Good
There's No One Exactly Like Me
Whenever Mary Puts Her Green Dress On

Seasons/Weather Songs
I Like to Sing
Popping Corn
It's Spring
Springtime, Springtime
Springtime Is Coming
What Shall We Do?

Sequence Songs
Old MacDonald Had a Farm

Transportation Songs
Traffic Lights
My Little Red Wagon

ACTION/GAME SONGS

Title: See individual selections

General Objectives: To sing a variety of songs correlating action and movement

To follow instructions with a song

Materials Needed: Tape Recorder
Also, see individual selections

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using actions and/or movement.

Have children sing song, using actions and/or movement and using any instruments, flash cards and other props listed in "Materials Needed".

Tape record and play back when song is familiar enough to children.

Evaluation: Observe whether children are able to correlate action and movement.

Observe whether children follow instructions within the songs.

Listen to singing, answers, comments, playing of instruments, etc.

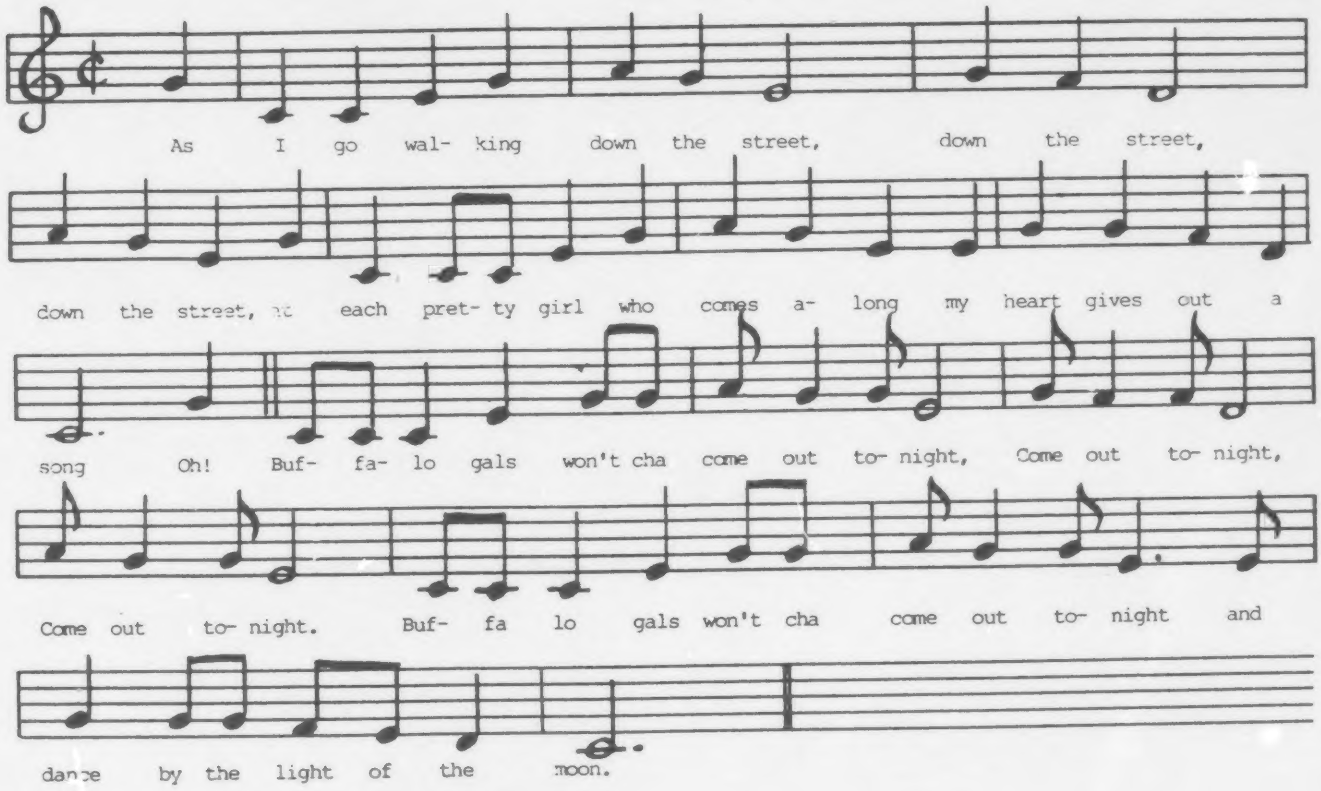
Make a checklist of names of children who need help feeling the pulse of the beat and/or controlling muscular coordination.

Listen to tape recording.

Note: You will find these ACTION/GAME SONGS especially helpful on days when children cannot go outside for energy release.

2. Dance with the dolly with the hole in her stocking
Her knees keep a knockin'
Her toes keep a rockin'
Dance with the dolly with the hole in her stocking
Dance by the light of the moon.

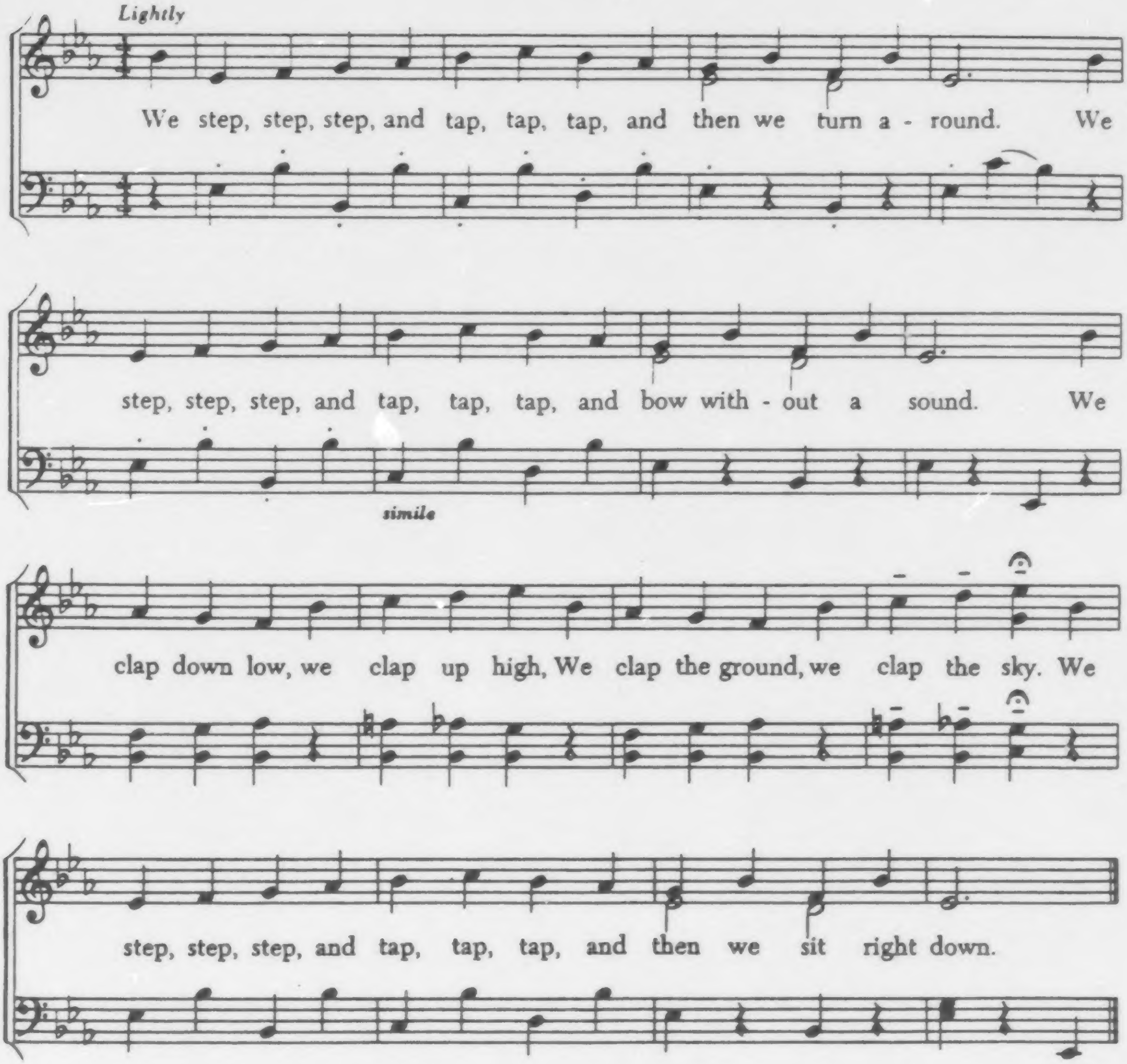
Buffalo Gals


As I go wal- king down the street, down the street,
down the street, at each pret- ty girl who comes a- long my heart gives out a
song Oh! Buf- fa- lo gals won't cha come out to- night, Come out to- night,
Come out to- night. Buf- fa lo gals won't cha come out to- night and
dance by the light of the moon.

Contributed by Martha McBryde

Busy

Words and Music by Alice E. Workman

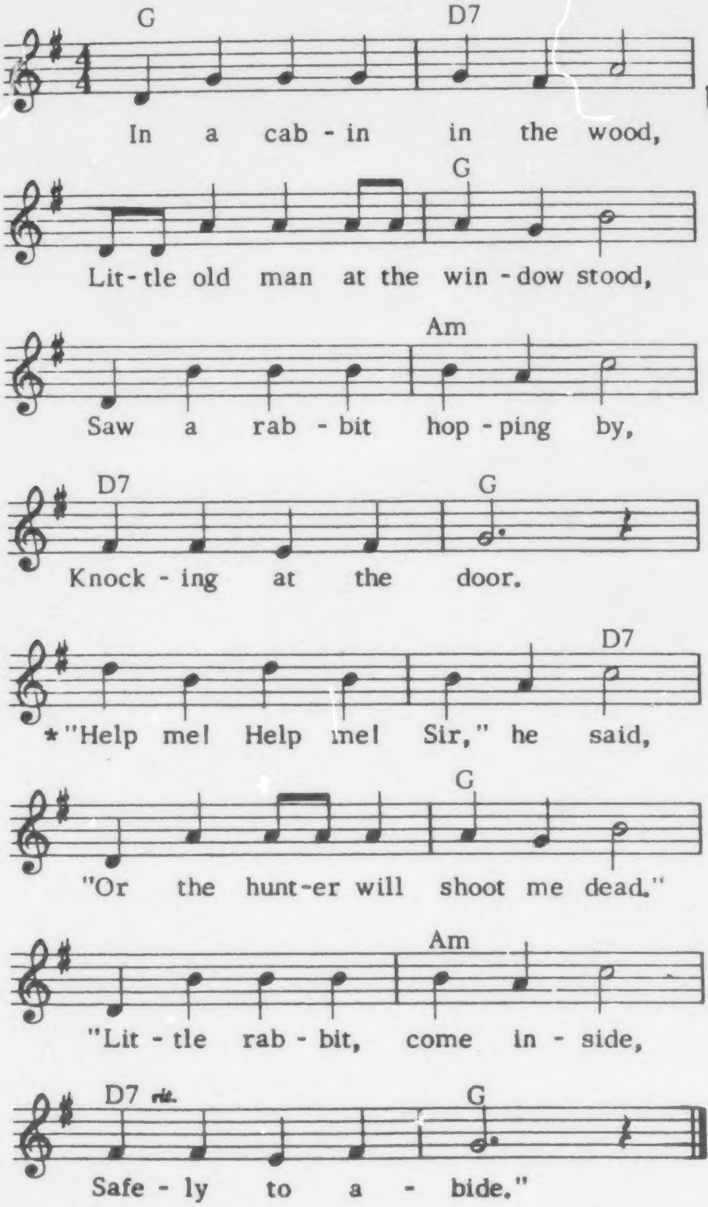

Lightly
We step, step, step, and tap, tap, tap, and then we turn a - round. We
step, step, step, and tap, tap, tap, and bow with - out a sound. We
simile
clap down low, we clap up high, We clap the ground, we clap the sky. We
step, step, step, and tap, tap, tap, and then we sit right down.

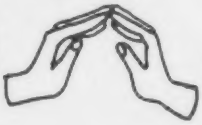
Used with Permission. Silver Burdett Co.
Making Music Your Own. p. 129, 1971.

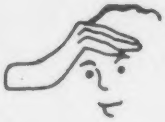
Additional Objectives:	To perform motions without words, dropping one phrase at a time
Additional Procedure:	When song has been learned well, sing it repeatedly replacing words with motions one line at a time until the entire song is performed with just the motions.
Additional Evaluation:	Observe whether children replace words with motions, one phrase at at time, until the entire song is performed with just the motions.

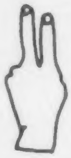
CABIN IN THE WOOD

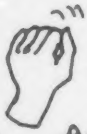
Traditional

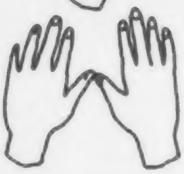

G
D7
In a cab - in in the wood,
G
Lit - tle old man at the win - dow stood,
Am
Saw a rab - bit hop - ping by,
D7
G
Knock - ing at the door.
D7
*"Help me! Help me! Sir," he said,
G
"Or the hunt-er will shoot me dead."
Am
"Lit - tle rab - bit, come in - side,
D7 rit.
G
Safe - ly to a - bide."

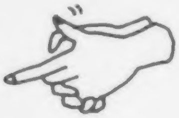

Make a roof.

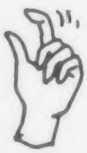

Shade eyes.

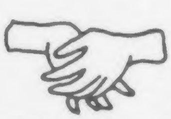

Make rabbit ears and hop.


Knock.


Raise hands twice.


Make gun with two hands. Click it.


Beckon.


Stroke back of one hand with the other.

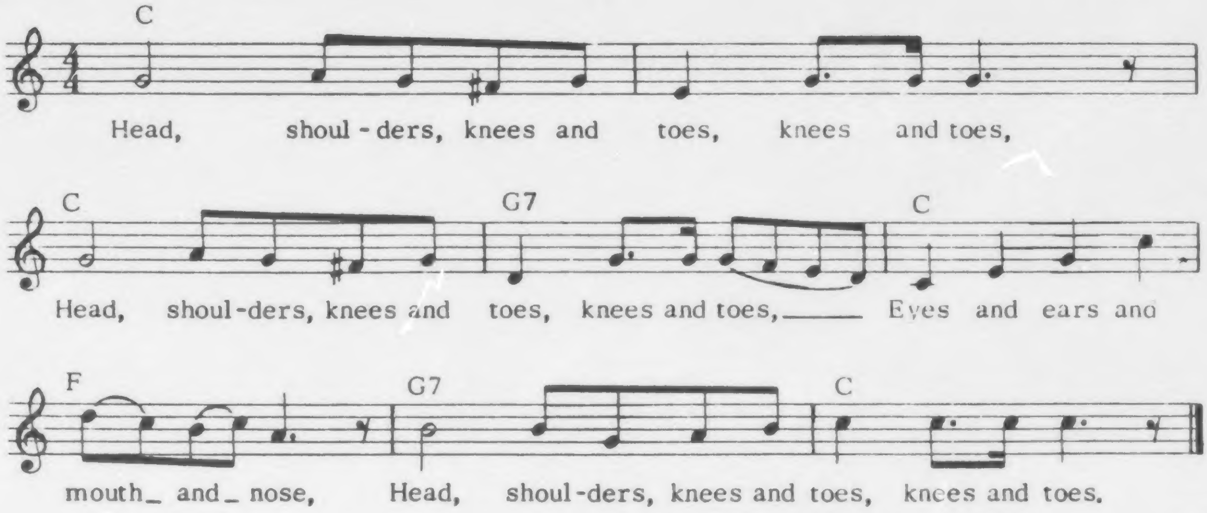
Permission Granted   Reaching the Special Learner Through Music, p. 122.

From RHYTHMS TODAY by Edna Doll and Mary Jarman Nelson. © 1965 Silver Burdett Company

Additional Objective:	To identify head, shoulders, knees, toes, eyes, ears, mouth and nose by pointing
Additional Evaluation:	Observe whether children are able to identify the body parts listed by pointing.

HEAD, SHOULDERS

Traditional


C
Head, shoul - ders, knees and toes, knees and toes,
C G7 C
Head, shoul-ders, knees and toes, knees and toes,___ Eyes and ears and
F G7 C
mouth_ and_ nose, Head, shoul-ders, knees and toes, knees and toes.

Used by permission. Silver Burdett Co.

Reaching the Special Learner Through Music, p. 138
Used by permission. Silver Burdett Co.

Additional
Objectives: To suggest other motions besides "clap your hands"

Additional
Materials
Needed: Rhythm instruments

Additional
Procedure: Ask students for suggestions for other actions besides "clap your hands".

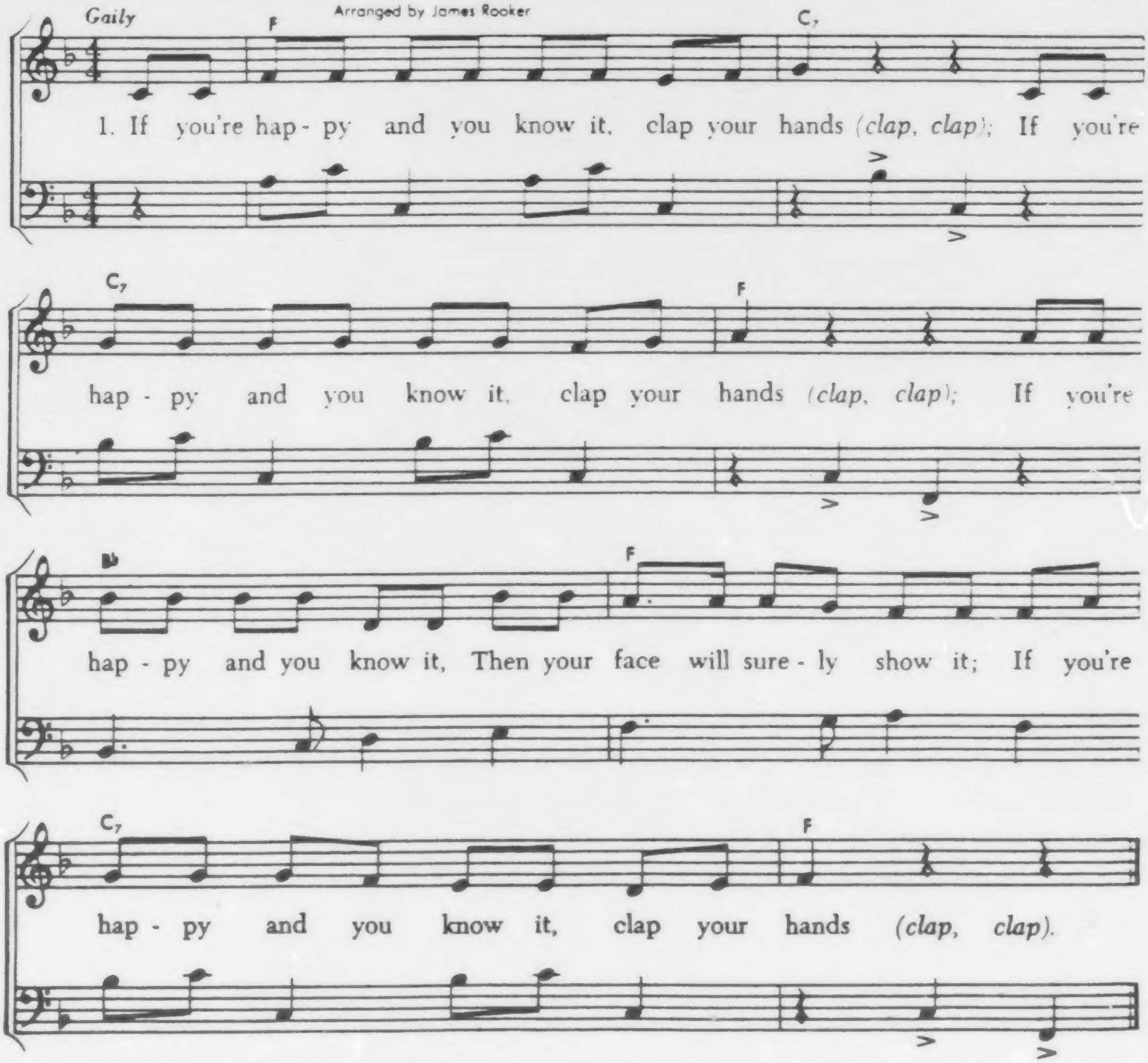
Allow students to play rhythm instruments.

Additional
Evaluation: Observe whether students offer other suggestions besides "clap your hands".*

*A favorite with some students: "If you're happy and you know it, say AMEN!" (pound one fist into the open play

If You're Happy

Traditional
Arranged by James Rooker

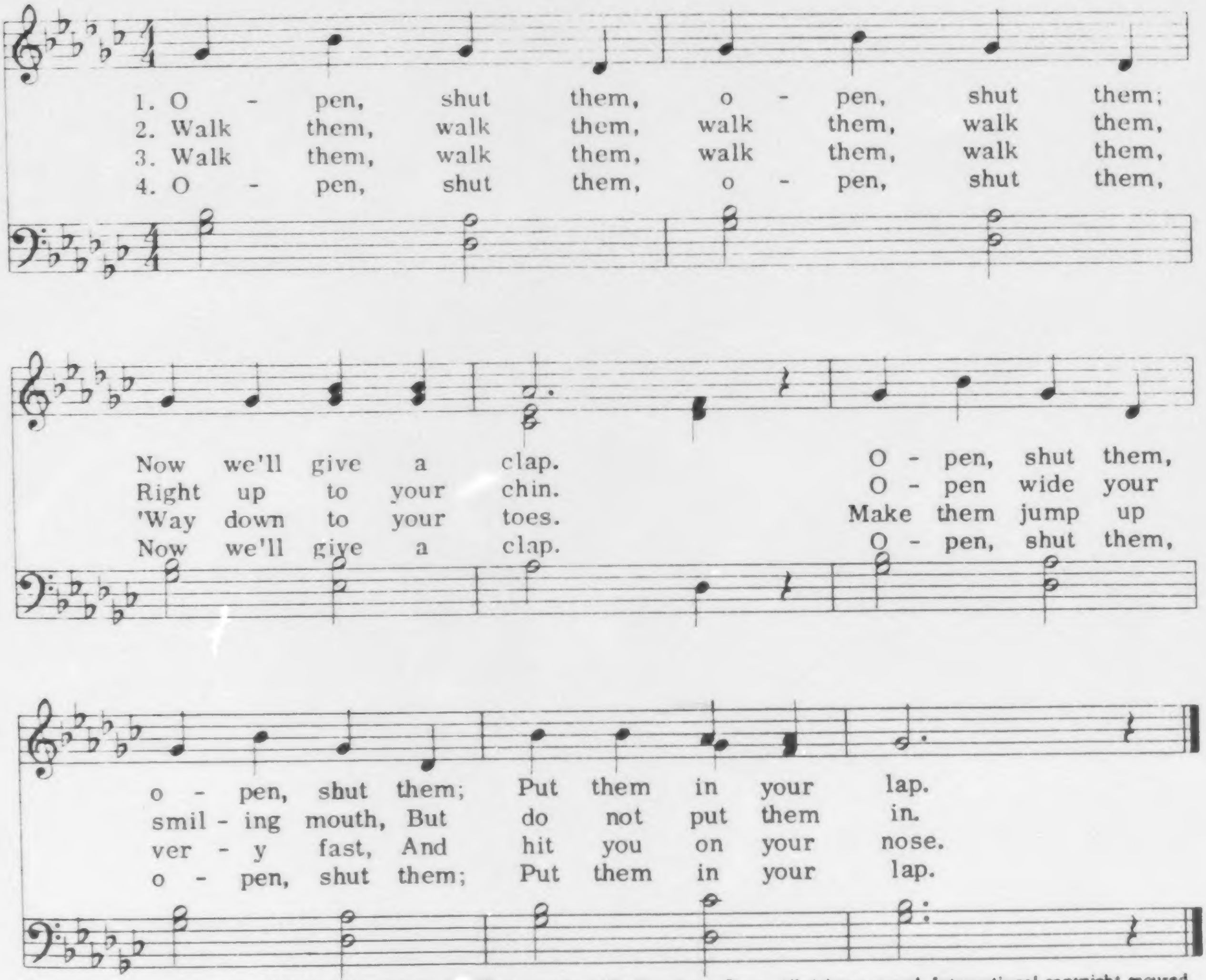

Gaily
F
C7
1. If you're hap - py and you know it, clap your hands (clap, clap); If you're
C7
F
hap - py and you know it, clap your hands (clap, clap); If you're
B♭
F
hap - py and you know it, Then your face will sure - ly show it; If you're
C7
F
hap - py and you know it, clap your hands (clap, clap).

Making Music Your Own, p. 10. Used by Permission. Silver Burdett Co

Additional
Materials
Needed: Piano
Bells, or other pitched instruments

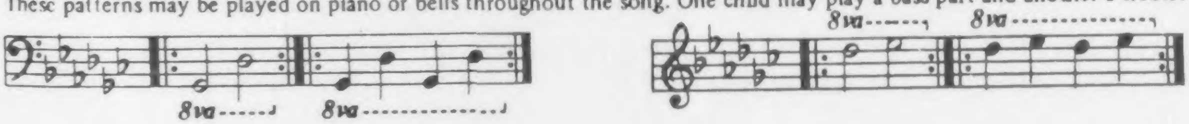
Additional
Procedure: Allow children to accompany, using patterns suggested.

OPEN, SHUT THEM


1. O - pen, shut them, o - pen, shut them;
2. Walk them, walk them, walk them, walk them,
3. Walk them, walk them, walk them, walk them,
4. O - pen, shut them, o - pen, shut them,
Now we'll give a clap. O - pen, shut them,
Right up to your chin. O - pen wide your
'Way down to your toes. Make them jump up
Now we'll give a clap. O - pen, shut them,
o - pen, shut them; Put them in your lap.
smil - ing mouth, But do not put them in.
ver - y fast, And hit you on your nose.
o - pen, shut them; Put them in your lap.

Traditional. Arrangement by ROY T. SCOGGINS, JR. ©Copyright 1970 Broadman Press. All rights reserved. International copyright secured.

These patterns may be played on piano or bells throughout the song. One child may play a bass part and another a treble.


8va
8va
8va
8va

Music for Today's Children, p. 47. Used by Permission.

Open, Shut Them (Continued)

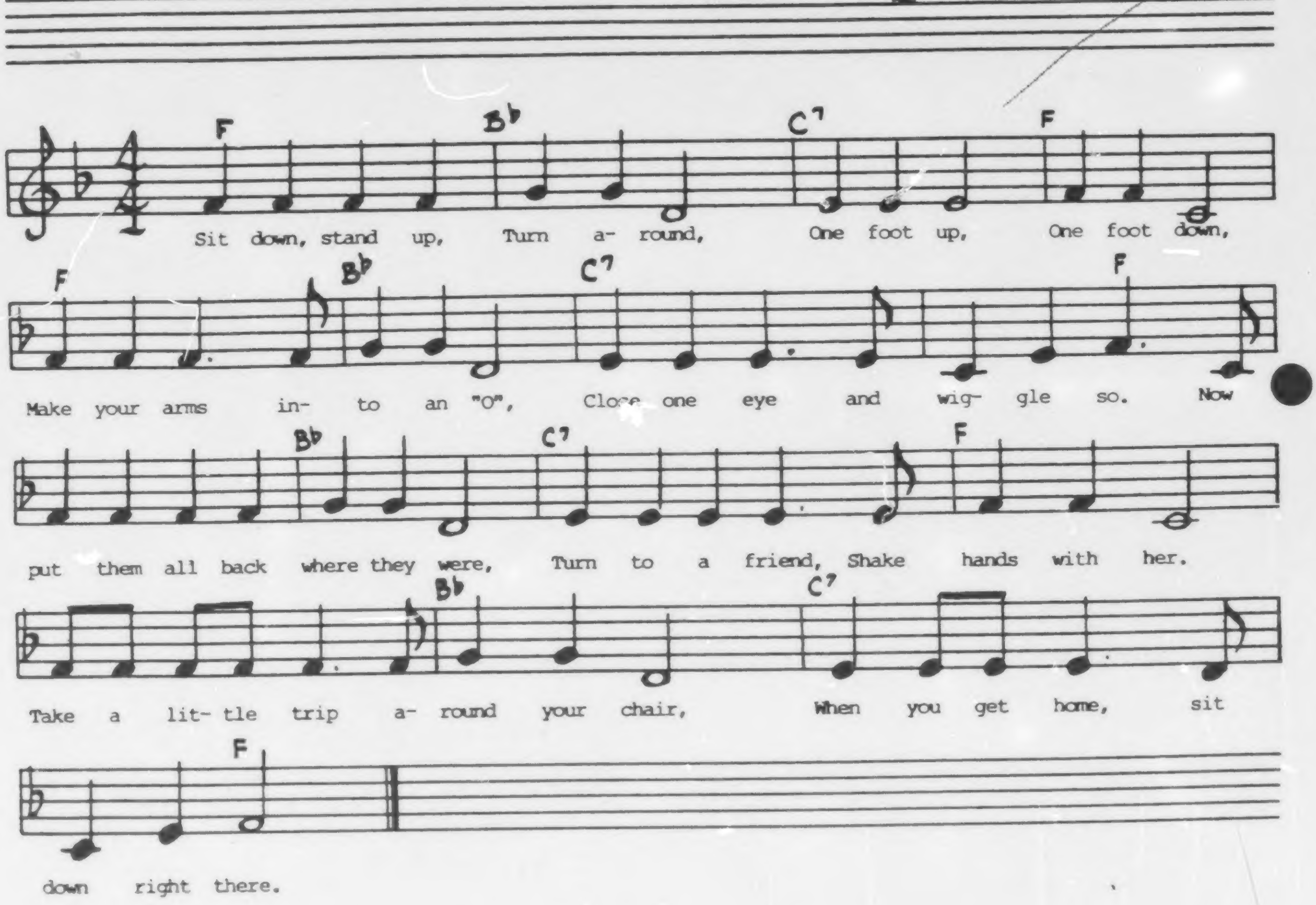
Additional Objectives: To dance with classmates
To suggest other movements after "skip"
To keep the beat with instruments

Additional Materials Needed: Rhythm instruments

Additional Procedure: Have children choose partners and dance.
Have children suggest other movements.
Have children play a 1, 2, rhythm as song is sung or played.

Additonal Evaluation: Observe whether children dance with classmates, suggest other movements after "skip" and keep the beat with instruments when song is sung or played.

Sit Down, Stand Up

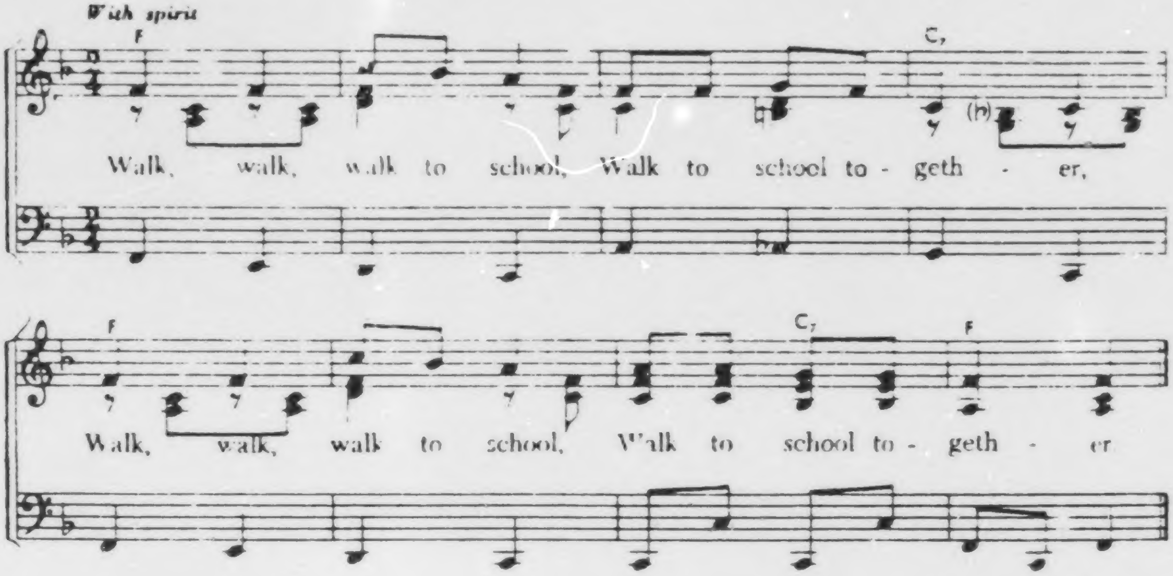

F Bb C7 F
Sit down, stand up, Turn a- round, One foot up, One foot down,
F Bb C7 F
Make your arms in- to an "O", Close one eye and wig- gle so. Now
Bb C7 F
put them all back where they were, Turn to a friend, Shake hands with her.
Bb C7
Take a lit- tle trip a- round your chair, When you get home, sit
F
down right there.

Contributed by Mary Jo Cliatt. MACUS Songsheet.

Walk to School

Mary Jaye   American Folk Song

Arranged by Albert DeVito


With spirit
F
C7
Walk, walk, walk to school, Walk to school to - geth - er,
F
C7
F
Walk, walk, walk to school, Walk to school to - geth - er

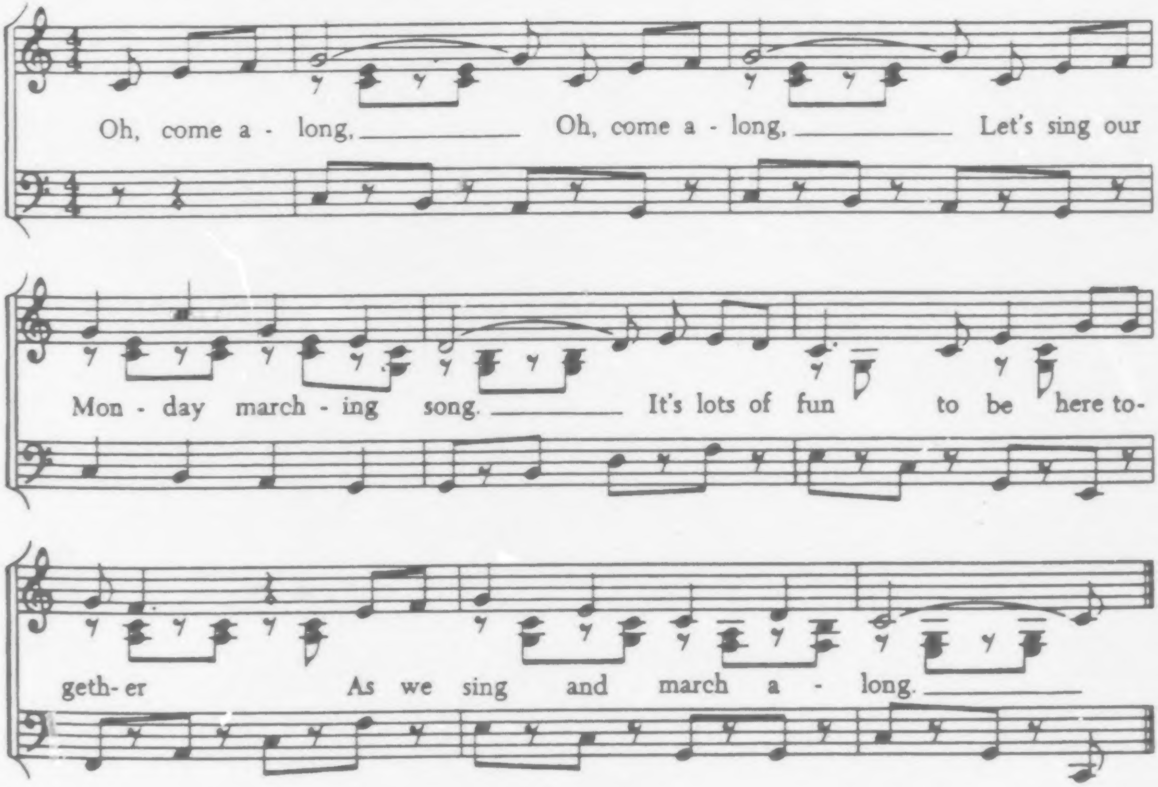
Children will be able to suggest other ways of coming to school--skipping, running, hopping, jumping, etc.

Making Music Your Own, p. 7.   Used by Permission. Silver Burdett Co.

Additional Objective:	To sing a song and fill in the correct name of the day of the week at the proper place
Additional Procedure:	Sing the song each day of the week, letting some child supply the name of the day before you sing.
Additional Evaluation:	Observe whether children can fill in the correct name of the day of the week at the proper place in the song.

Marching Song

Helen Myers Cornwell   Negro Spiritual
Arranged by Alice Firgau


Oh, come a - long, Oh, come a - long, Let's sing our
Mon - day march - ing song. It's lots of fun to be here to-
geth- er As we sing and march a - long.

Making Music Your Own, p. 35., 1971.
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ANIMALS/BUGS/INSECTS/BIRDS

Title: See individual selections

General Objectives: To sing songs about animals, bugs, insects, and birds--their homes, habits, etc.

Materials Needed: Tape recorder

Pictures, drawings and/or replicas of creatures named in objectives and sung about in the songs

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using any action and/or movement.

Have children sing song, using actions and/or movement and using any pictures or other props listed in "Materials Needed".

Tape record and play back when song is familiar enough to children.

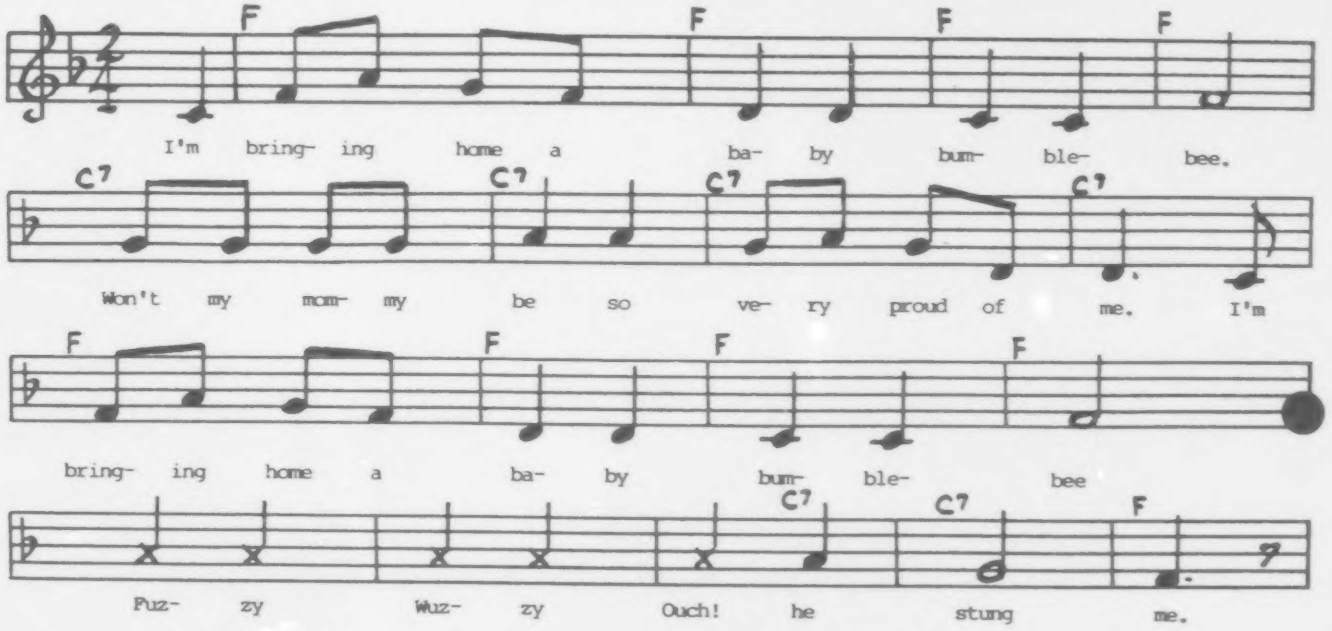
Evaluation: Observe participation in singing of songs.

Listen to answers and comments from children to determine whether they can identify pictures and/or replicas of creatures, their homes, etc.

Listen to tape recording.

Note: When circumstances permit, LIVE animals (which may be children's personal pets) should be brought to the classroom. A field trip to a well-stocked farm is also sure to delight students.

Bumblebee

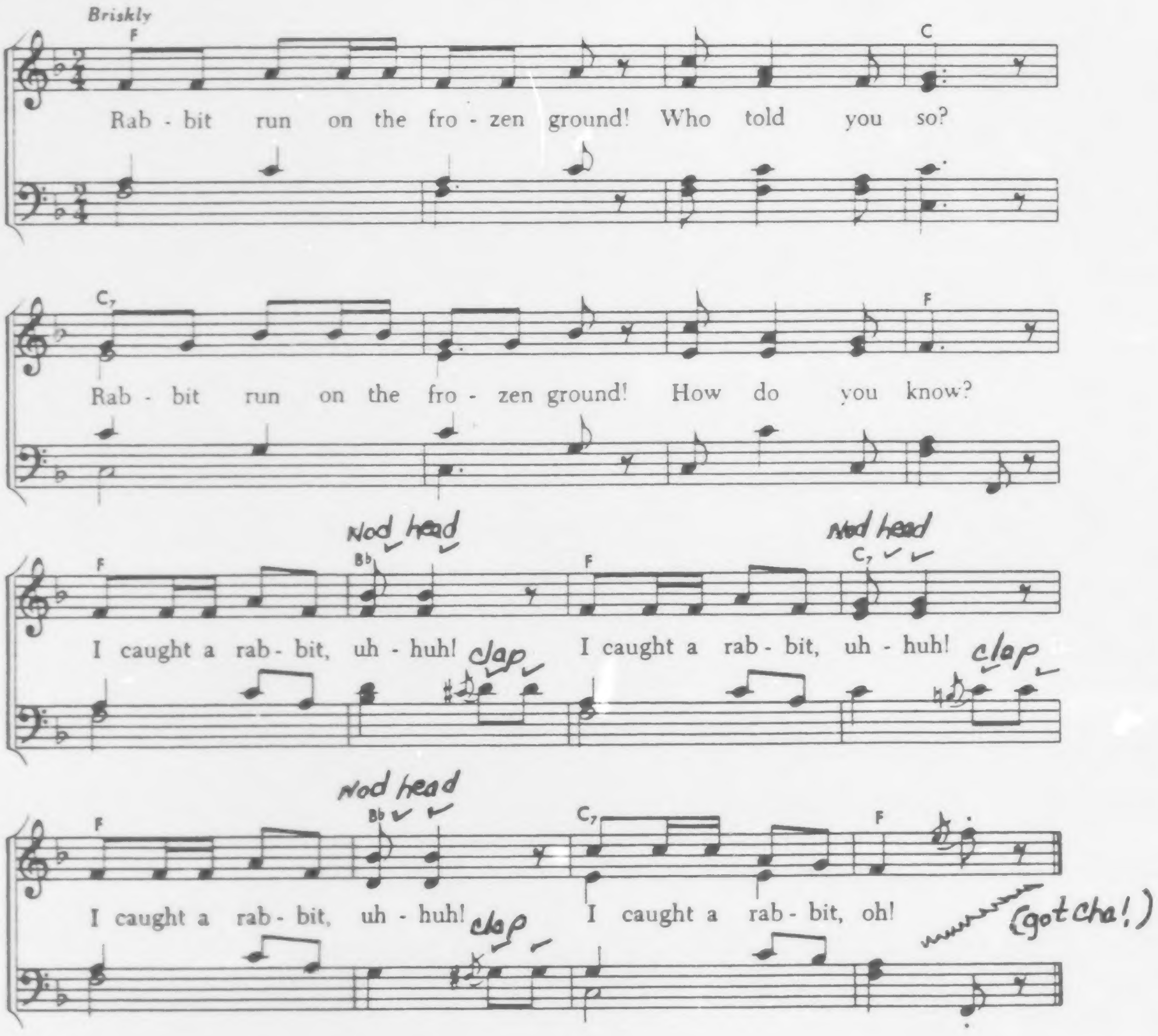

F F F F
I'm bring- ing home a ba- by bum- ble- bee.
C7 C7 C7 C7
Won't my mom- my be so ve- ry proud of me. I'm
F F F F
bring- ing home a ba- by bum- ble- bee
C7 C7 F
Fuz- zy Wuz- zy Ouch! he stung me.

Fishing worm . . . squiggle and squirm . . . ooey - gooey
Rattlesnake . . . shiver and shake . . . oops! I dropped it.
Dinosaur . . . go right through the floor . . oops! there goes mommy.

Used by permission.

Caught a Rabbit

Kentucky Folk Song   Collected by Jean Thomas, The Traipsin' Woman
Arranged by Darrell Peter


Briskly
F
C
Rab - bit run on the fro - zen ground! Who told you so?
C7
F
Rab - bit run on the fro - zen ground! How do you know?
Nod head
Nod head
F
Bb
F
C7
I caught a rab - bit, uh - huh! I caught a rab - bit, uh - huh!
clap
clap
Nod head
F
Bb
C7
F
I caught a rab - bit, uh - huh! I caught a rab - bit, oh!
clap
(gotcha!)

Making Music Your Own, p. 108. Silver Burdett Company
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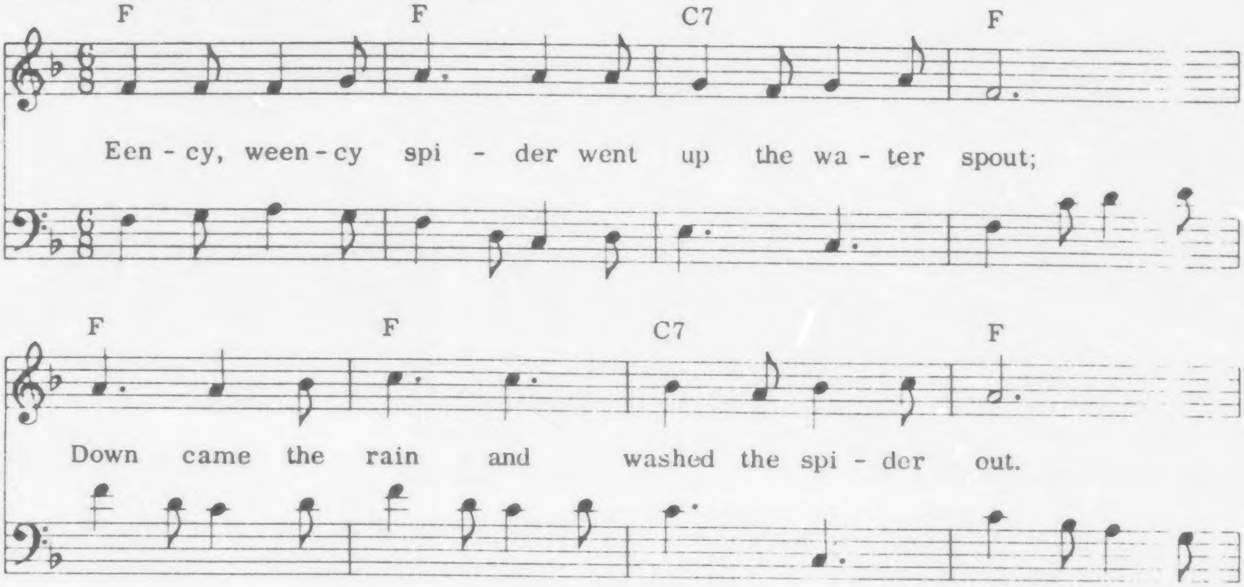
EENCY, WEENCY SPIDER


F
F
C7
F
Een - cy, ween - cy spi - der went up the wa - ter spout;
F
F
C7
F
Down came the rain and washed the spi - der out.
F
F
C7
F
Out came the sun and dried up all the rain, And the
F
F
C7
F
een - cy, ween-cy spi - der went up the spout a - gain.

Traditional. Arranged by MORGAN LOWRY. Arrangement

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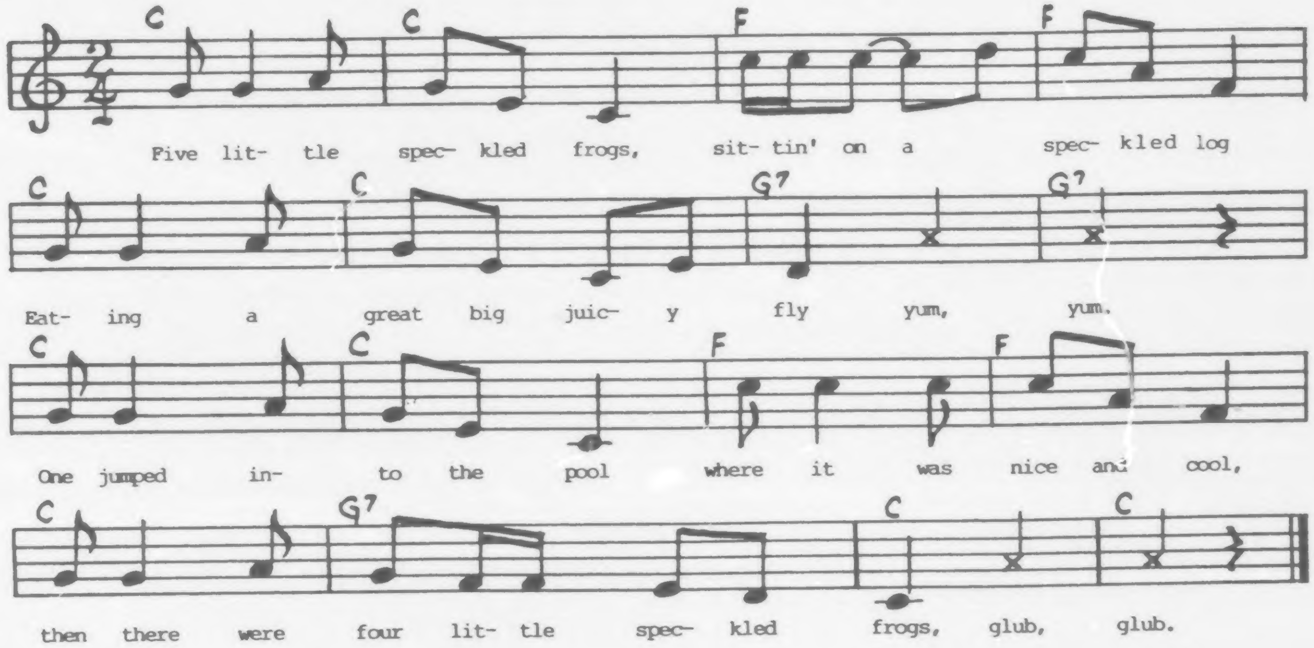
Music for Today's Children, p. 46. Used by Permission

Additional Objective: To sing a song in descending sequence, 5 to 1

Additional Evaluation: Observe whether children sing song correctly in sequence 5, 4, 3, 2, 1 "little speckled frogs".

Five Little Speckled Frogs

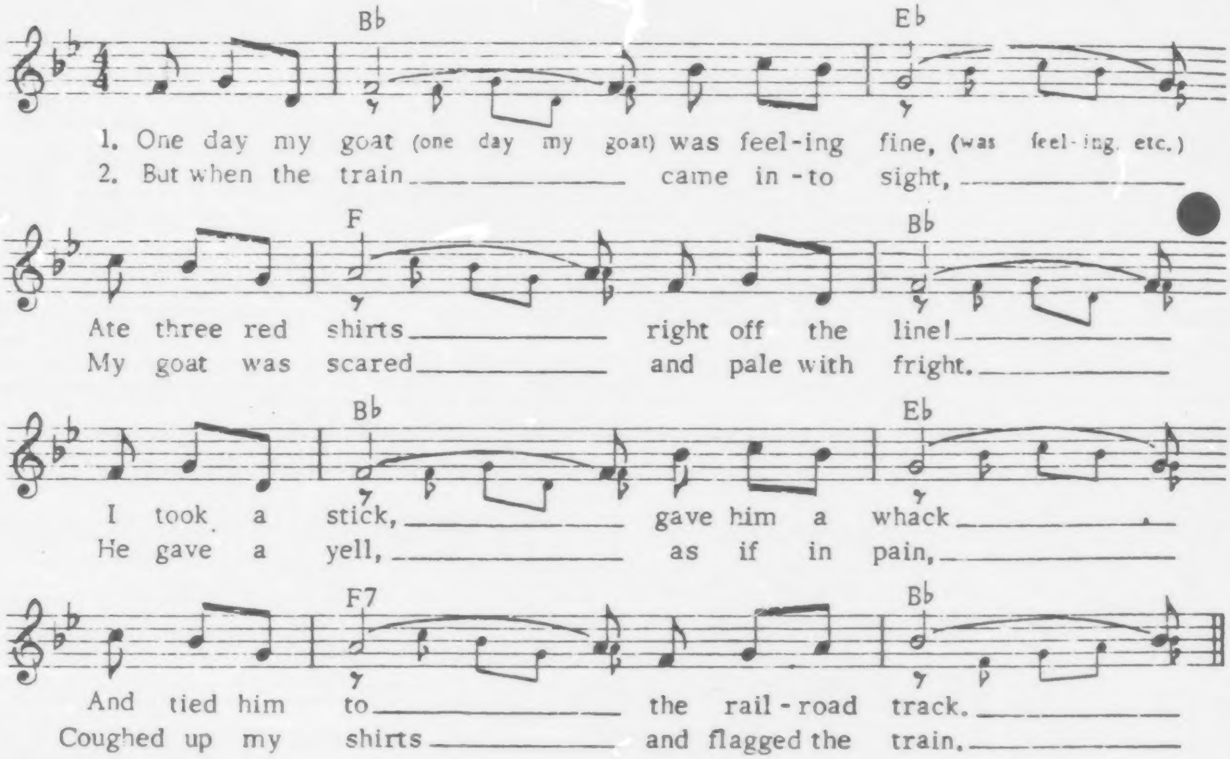

C C F F
Five lit- tle spec- kled frogs, sit- tin' on a spec- kled log
C C G7 G7
Eat- ing a great big juic- y fly yum, yum.
C C F F
One jumped in- to the pool where it was nice and cool,
C G7 C C
then there were four lit- tle spec- kled frogs, glub, glub.

Used by Permission.

Additional Objective:	To echo a phrase sung by a leader
Additional Procedure:	Have one group sing phrase as other echo. Allow a volunteer to sing the phrase as a solo while the others echo.
Additional Evaluation:	Observe whether children can repeat the phrase sung by a leader. Observe whether children can sing phrases alone and let others be the echo.

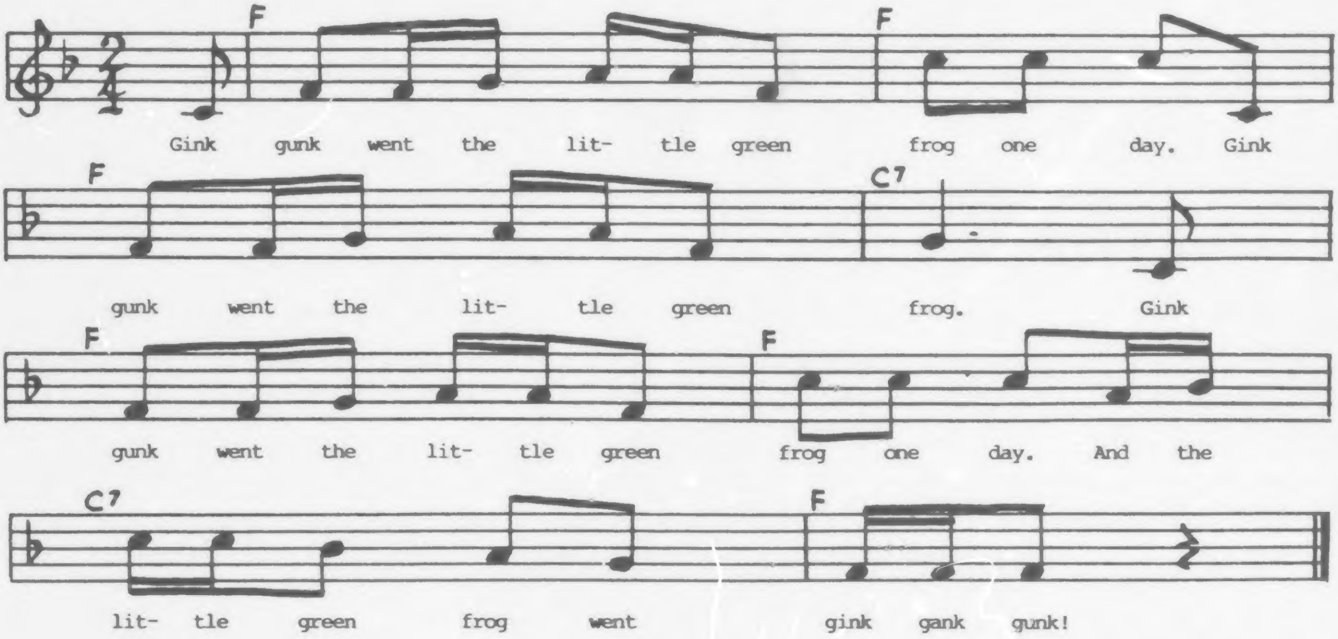
THE GOAT

American Folk Song


Bb
Eb
1. One day my goat (one day my goat) was feel-ing fine, (was feel-ing. etc.)
2. But when the train came in-to sight,
F
Bb
Ate three red shirts right off the line!
My goat was scared and pale with fright.
Bb
Eb
I took a stick, gave him a whack.
He gave a yell, as if in pain,
F7
Bb
And tied him to the rail-road track.
Coughed up my shirts and flagged the train.

Reaching the Special Learner Through Music, p. 136
Used by Permission. Silver Burdett Co.

Green Frog

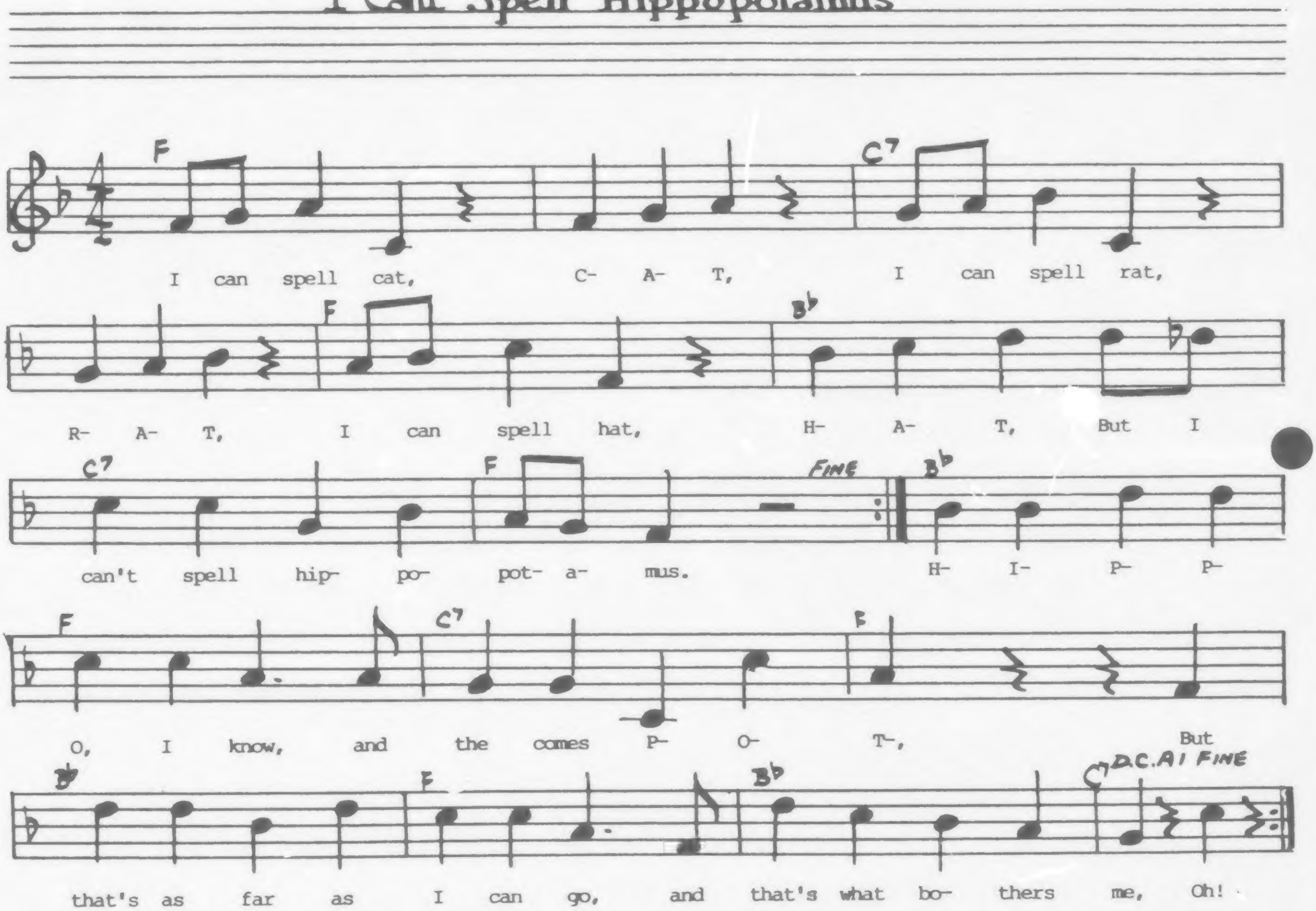

F
F
C7
Gink gunk went the lit- tle green frog one day. Gink
gunk went the lit- tle green frog. Gink
gunk went the lit- tle green frog one day. And the
lit- tle green frog went gink gank gunk!

2. Now, you'e heard the folks go VO - DO - DO, VO
DO - DO - DO, VO - DO - DO. Now,
you've heard the folks go VO - DO - DO. But you've
never heard folks go gink gank gunk!

Used with Permission.

Additional Objective:	To learn to spell cat, rat, hat; dog, log, hog; top, mop, and hop.
Additional Materials Needed:	Flash cards on which the words to be learned have been written
Additional Evaluation:	Observe whether children are able to identify words when flash cards are held up.

I Can't Spell "Hippopotamus"


F
C7
Bb
FINE
D.C. Al FINE
I can spell cat, C- A- T, I can spell rat,
R- A- T, I can spell hat, H- A- T, But I
can't spell hip- po- pot- a- mus.
H- I- P- P-
O, I know, and the comes P- O- T-, But
that's as far as I can go, and that's what bo- thers me, Oh!

2. I can spell dog, D-O-G, I can spell log, L-O-G, I can spell hog, H-O-G, (repeat chorus)
3. I can spell top, T-O-P, I can spell mop, M-O-P, I can spell hop, H-O-P, (repeat chorus)

MACUS Songsheet Used by Permission.

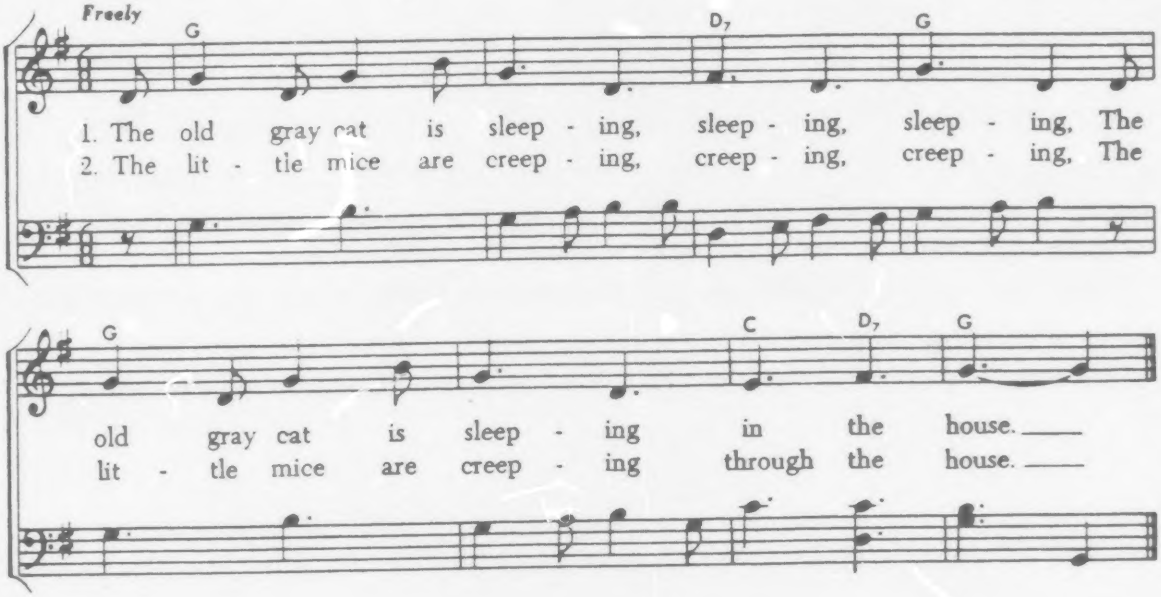
Additional Objective: To act out the cat/mouse drama sung about in the song

Additional Procedure: Let children take turns being the cat-- "Cat" catches a scampering mouse, who becomes the new "Cat".

Additional Evaluation: Observe whether the children act out the cat/mouse drama sung about in the song.

The Old Gray Cat

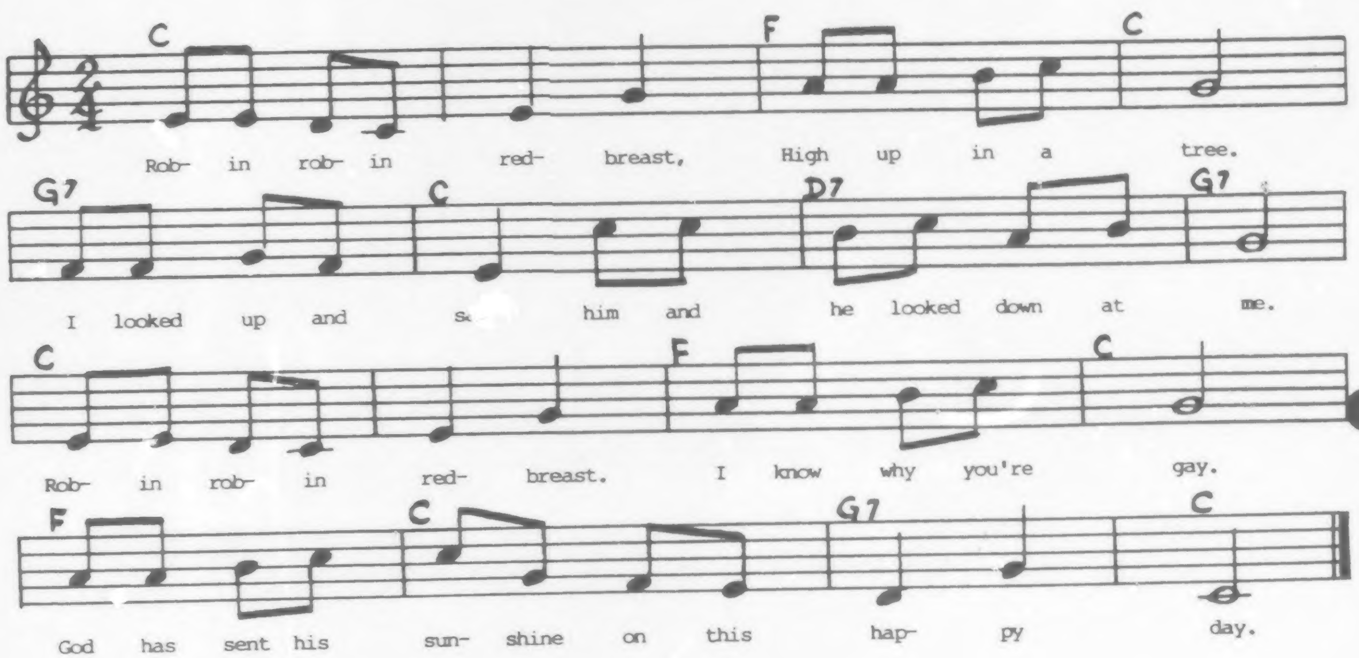
Traditional American Song
Arranged by Cameron McGraw


Freely
G
D7
G
1. The old gray cat is sleep - ing, sleep - ing, sleep - ing, The
2. The lit - tle mice are creep - ing, creep - ing, creep - ing, The
G
C
D7
G
old gray cat is sleep - ing in the house.
lit - tle mice are creep - ing through the house.

3. the little mice are nibbling . . . in the house.
4. the little mice are sleeping . . . in the house.
5. the old gray cat comes creeping . . . through the house. (Play all "Bs" as Bb)
6. the little mice all scamper . . . through the house. (Faster tempo)

Making Music Your Own, p. 17. Used by Permission. Silver Burdett Co.

Robin Robin Redbreast


C
Rob- in rob- in red- breast, F High up in a C tree.
G7 I looked up and C see him and D7 he looked down at G7 me.
C Rob- in rob- in red- breast. F I know why you're C gay.
F God has sent his C sun- shine on this G7 hap- py C day.

Contributed by Martha McBryde.

Additional Objective: To form a group of six in number without teacher assistance

To identify the number represented by any leftover (less-than-six) groups

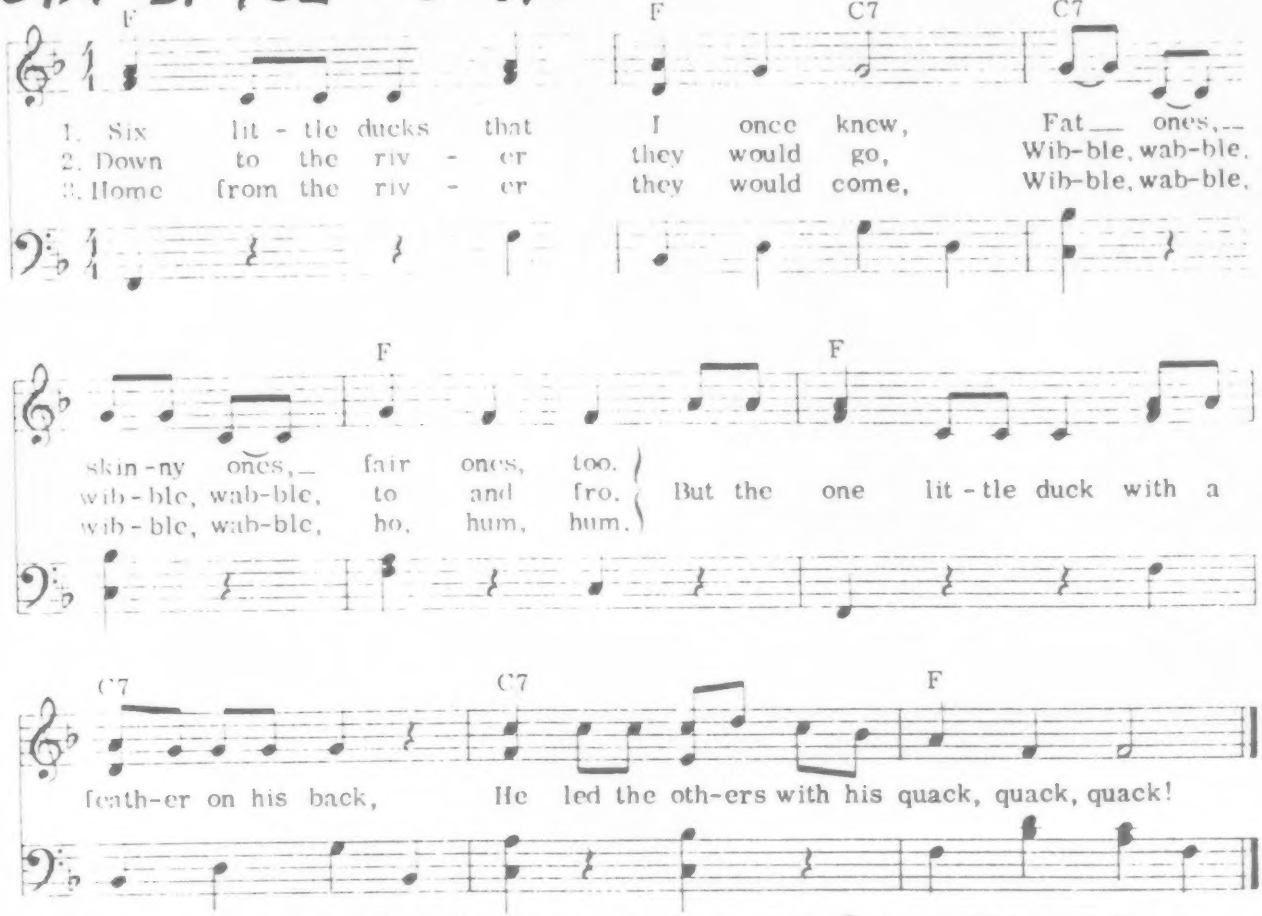
Additional Procedure: Instruct children to form groups of "six ducks".

Have children in group of less than six identify the number they represent (if there are children left over after the six group/groups are formed).

Additional Evaluation: Observe whether children can group themselves into teams of six when instructed to do so.

Observe whether children in smaller-than-six left-over groups can identify the number they represent.

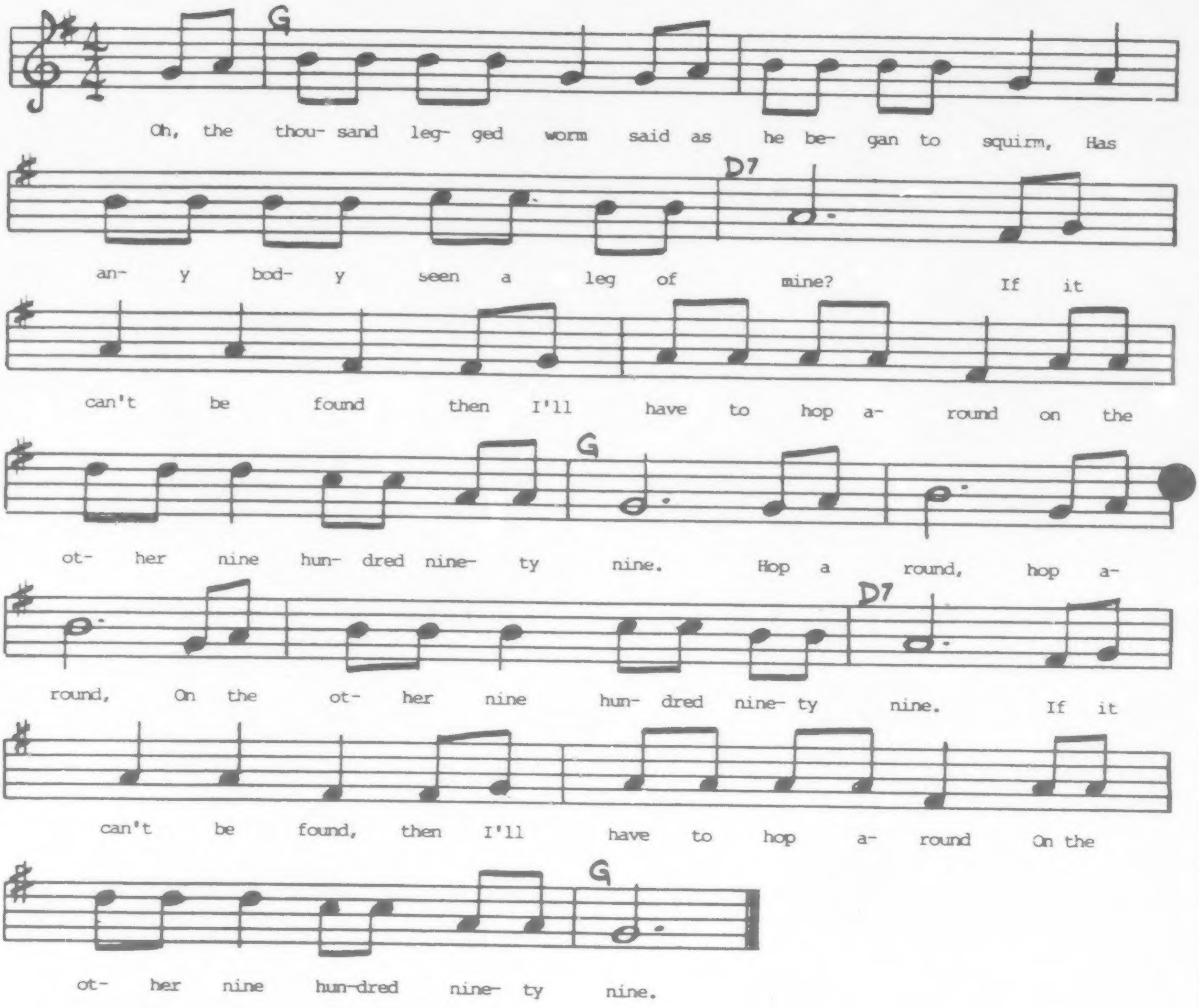
SIX LITTLE DUCKS


F
F
C7
C7
1. Six lit - tle ducks that I once knew, Fat ones, skin-ny ones, fair ones, too.
2. Down to the riv - er they would go, Wib-ble, wab-ble, wib-ble, wab-ble, to and fro.
3. Home from the riv - er they would come, Wib-ble, wab-ble, wib-ble, wab-ble, ho, hum, hum.
F
F
But the one lit - tle duck with a
C7
C7
F
feath-er on his back, He led the oth-ers with his quack, quack, quack!

Folk Song from Maryland. Arranged by CAMERON McGRAW. From *Sing Together, Children*. © Copyright 1959 Cooperative Recreation Service, Inc. All rights reserved. Used by permission.

Music for Today's Children, p. 107.

The Thousand-Legged Worm

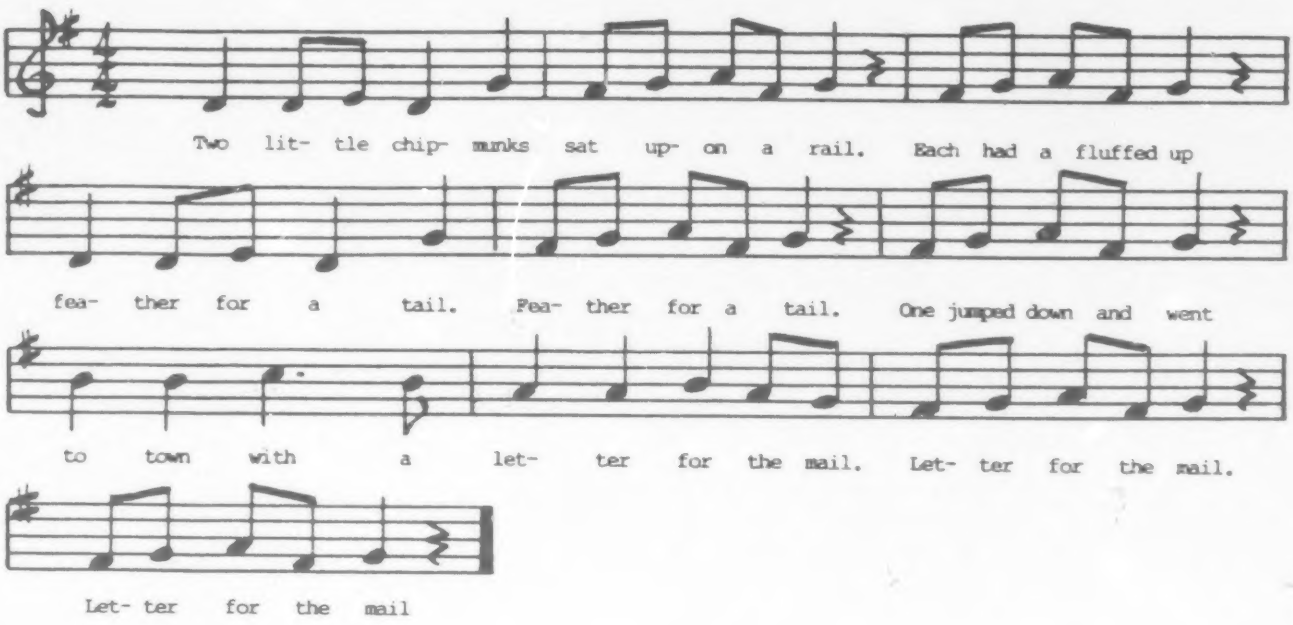


G
Oh, the thou- sand leg- ged worm said as he be- gan to squirm, Has
D7
an- y bod- y seen a leg of mine? If it
can't be found then I'll have to hop a- round on the
G
ot- her nine hun- dred nine- ty nine. Hop a round, hop a-
D7
round, On the ot- her nine hun- dred nine- ty nine. If it
can't be found, then I'll have to hop a- round On the
G
ot- her nine hun-dred nine- ty nine.

Used with Permission. MACUS Songsheet

2. One little chipmunk, sitting all alone (sitting all alone)
Picked up a note and found it was a bone (found it was a bone)
This I know, is all just so,
'cause I heard it on the phone. (Heard it on the phone).

Two Little Chipmunks


Two lit- tle chip- munks sat up- on a rail. Each had a fluffed up
fea- ther for a tail. Fea- ther for a tail. One jumped down and went
to town with a let- ter for the mail. Let- ter for the mail.
Let- ter for the mail

Contributed by Martha McBryde.

SONGS ABOUT FLOWERS/VEGETABLES/SEEDS

Title: See individual selections

General Objectives: To sing songs about flowers, vegetables and seeds

To identify pictures and actual examples of some of these items and to discuss their uses

Materials Needed: Pictures of (or real) flowers, vegetables, and seeds

Tape recorder

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using any action and/or movement.

Have children sing song, using actions and/or movement, and using any flash cards, pictures, and other props listed in "Materials Needed".

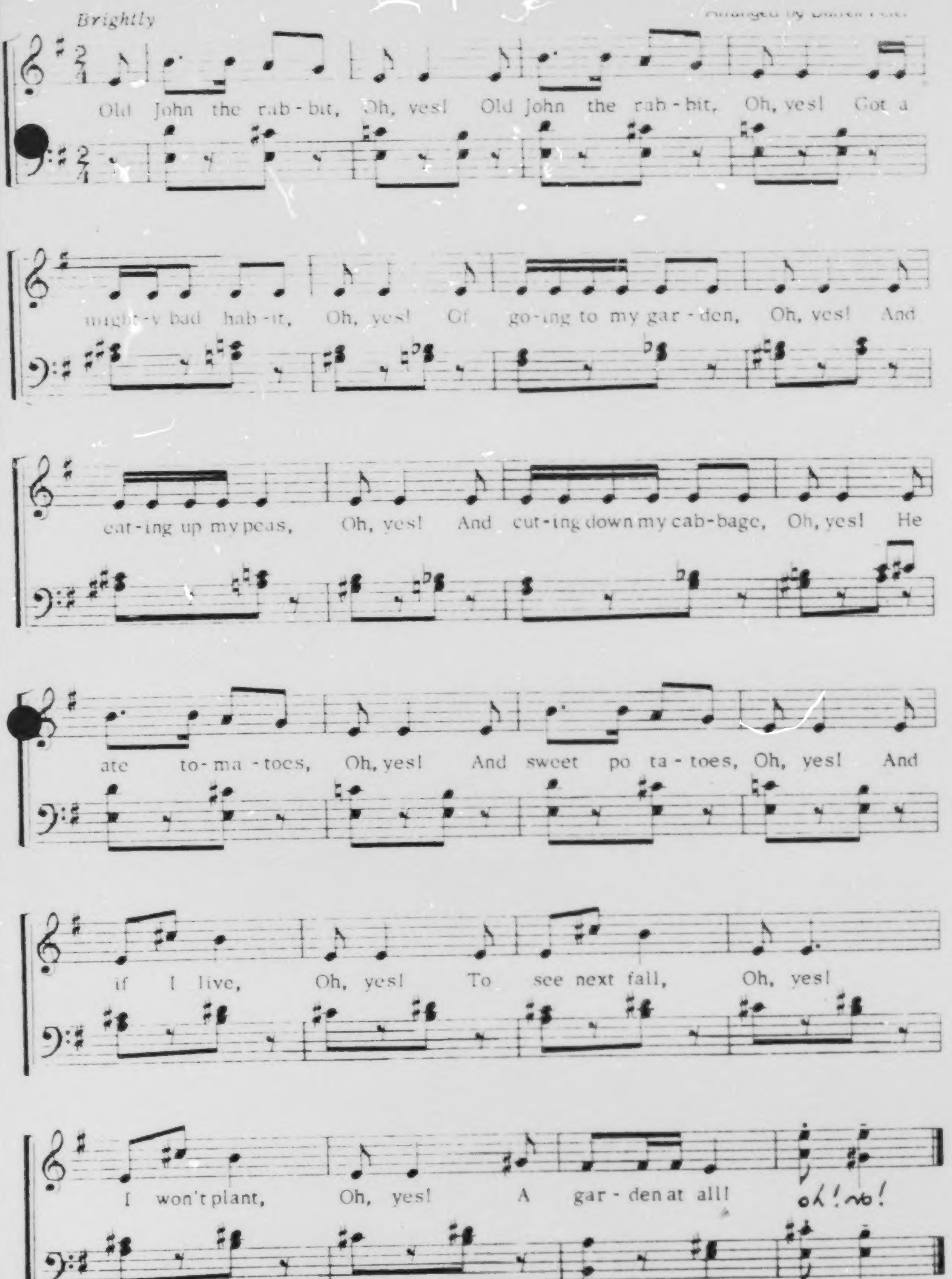
Tape record and play back when song is familiar enough to children.

Evaluation: Observe participation in singing of songs.

Listen to answers and comments from children and observe whether they can identify flowers, vegetables, and seeds when pictures and actual examples are shown to them.

Observe whether children can identify uses of items pictured when asked.

Listen to tape recording.


Brightly
Old John the rab-bit, Oh, yes! Old John the rab-bit, Oh, yes! Got a
might-y bad hab-it, Oh, yes! Of go-ing to my gar-den, Oh, yes! And
eat-ing up my peas, Oh, yes! And cut-ting down my cab-bage, Oh, yes! He
ate to-ma-toes, Oh, yes! And sweet po-ta-toes, Oh, yes! And
if I live, Oh, yes! To see next fall, Oh, yes!
I won't plant, Oh, yes! A gar-den at all!
oh! no!

Reaching the Special Learner Through Music, p. 155.
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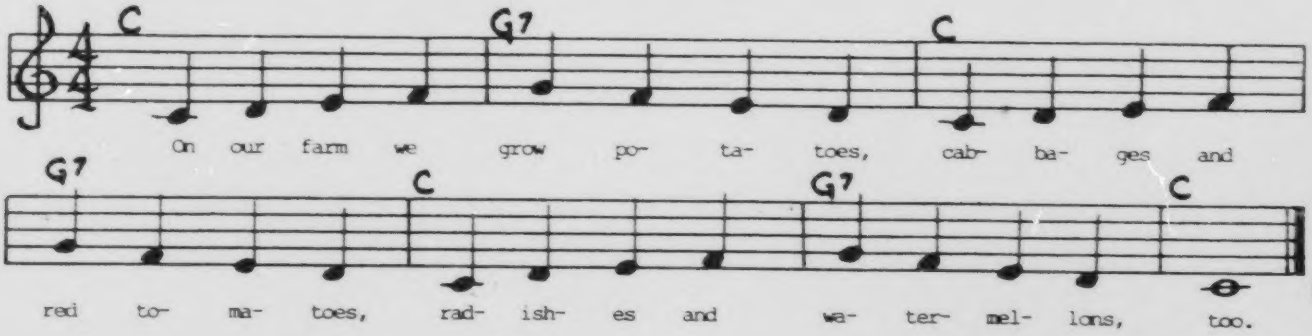
On Our Farm


C
G7
C
On our farm we grow po- ta- toes, cab- ba- ges and
G7
C
G7
C
red to- ma- toes, rad- ish- es and wa- ter- mel- lons, too.

MACUS Songsheet. Used with Permission

SONGS ABOUT
HOME AND FAMILY, FRIENDS, CITIZENSHIP

Title: See individual selections

General Objectives: To sing songs about home and family, friends, and citizenship

Materials Needed: Tape recorder

Pictures of home scenes (maybe from the children's families), friends in various situations, and persons displaying good citizenship habits.

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using actions and/or movement.

Have children sing song, using actions and/or movement, and using any pictures, etc., listed in "Materials Needed".

Tape record and play back when song is familiar enough to children.

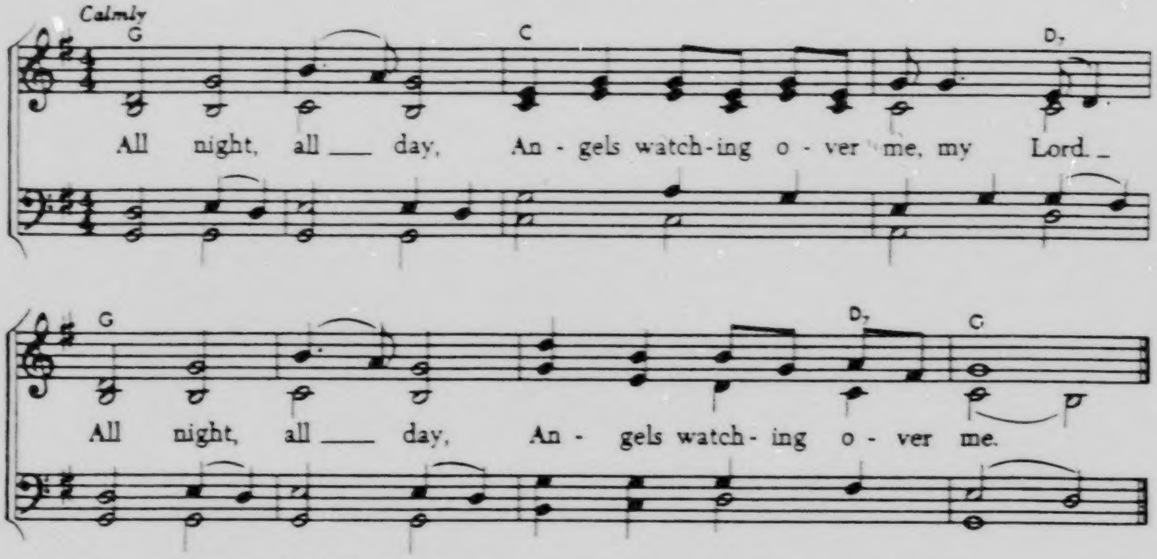
Evaluation: Observe participation.

Listen to tape recording.

All Night, All Day

Negro Spiritual

Arranged by James Rooker


Calmly
G
C
D7
All night, all ___ day, An - gels watch-ing o - ver me, my Lord. _
G
D7
G
All night, all ___ day, An - gels watch - ing o - ver me.

Silver Burdett Company, 1979. Used with permission.

Making Music Your Own, p. 22
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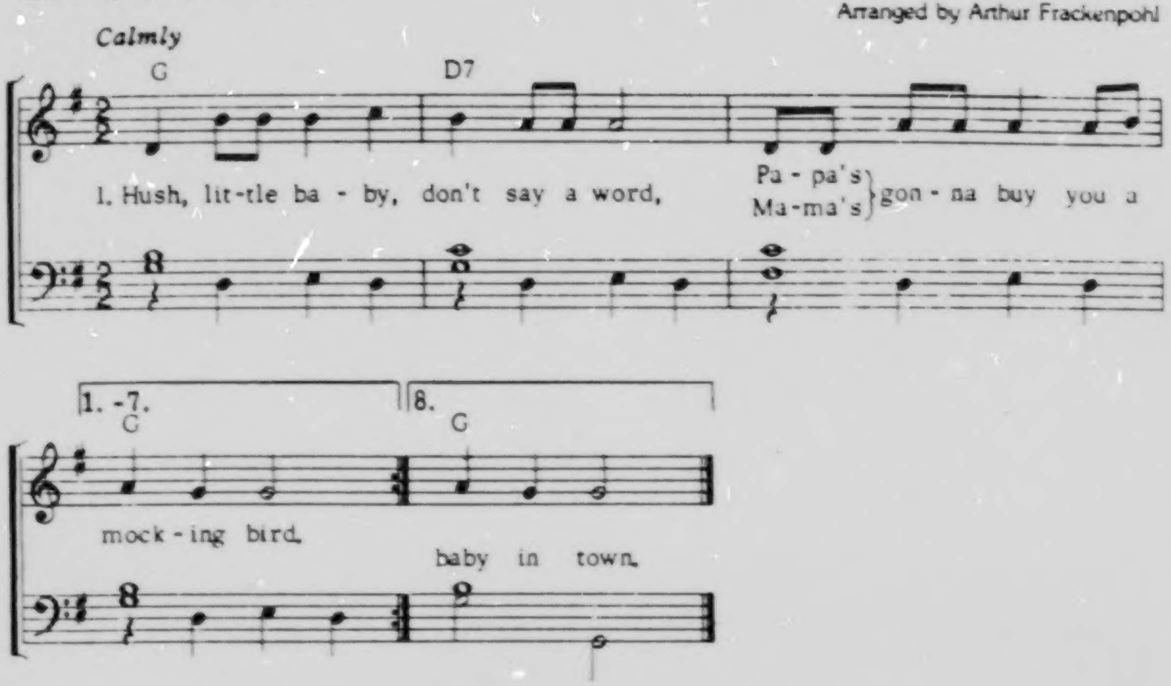
HUSH, LITTLE BABY

Southern Folk Song
Arranged by Arthur Frackenpohl


Calmly
G
D7
1. Hush, lit-tle ba - by, don't say a word,
Pa - pa's
Ma-ma's
gon - na buy you a
1. -7.
8.
G
G
mock - ing bird.
baby in town.

2. If that mockingbird won't sing,
Papa's (Mama's) gonna buy you a di'mond ring.

3. If that di'mond ring turns brass, . . . a looking glass.

4. If that looking glass gets broke, . . . a billy goat.

5. If that billy goat won't pull, . . . a cart and bull.

6. If that cart and bull turn over, . . . a dog named Rover.

7. If that dog named Rover won't bark, . . . a horse and cart.

8. If that horse and cart fall down,
You'll be the sweetest baby in town.

Reaching the Special Learner Through Music, p. 140.
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Alternate words to "Hush Little Baby"*

Hush, little baby, don't say a word!
Mama's gonna buy you a mockingbird.

If that mockingbird don't sing,
Mama's gonna buy you a diamond ring.

If that diamond ring turns brass,
Mama's gonna buy you a looking glass.

If that looking glass get's broke,
Mama's gonna buy you a billy goat.

If that billy goat runs away,
Mama's gonna buy you a Chevrolet.

If that Chevrolet won't run,
Mama's gonna buy you a shootin' gun.

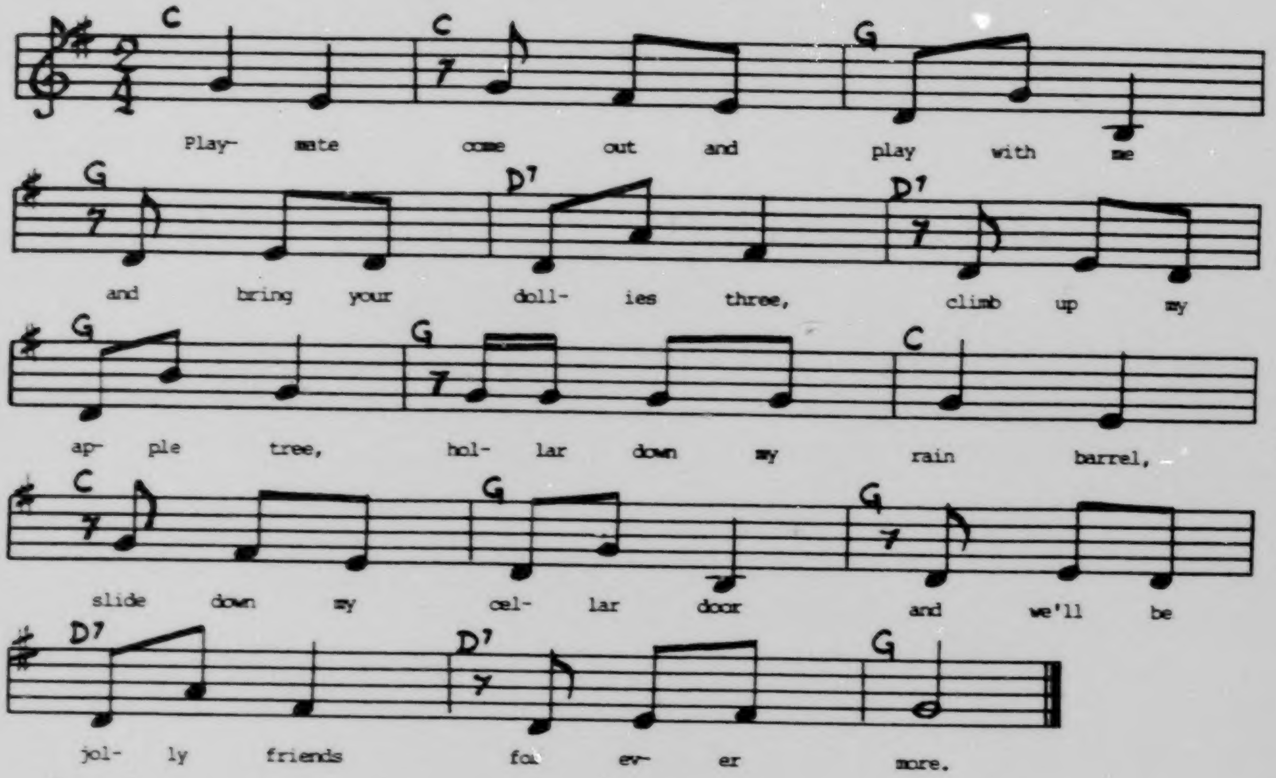
And if that shootin' gun won't shoot,
Mama's gonna buy you a pair of boots.

If that pair of boots wears out,
Mama's gonna wear you rumpus out!*

---

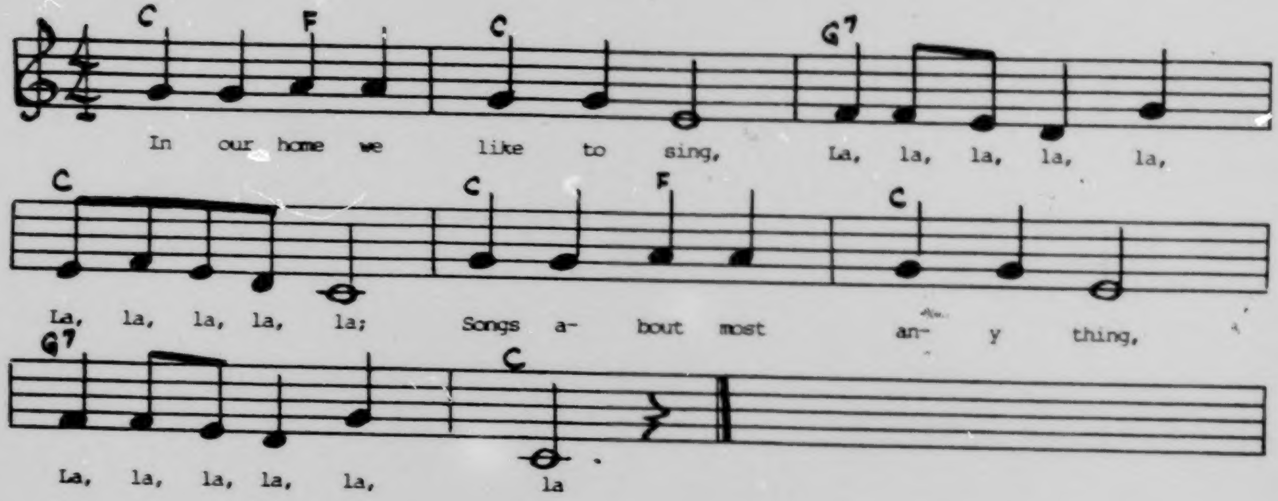
*Children enjoy this verse.

Playmate


C C G
Play- mate come out and play with me
G D7 D7
and bring your doll- ies three, climb up my
G G C
ap- ple tree, hol- lar down my rain barrel,
C G G
slide down my cel- lar door and we'll be
D7 D7 G
jol- ly friends for ev- er more.

Used by Permission. MACUS Songsheet.

Singing Makes A Happy Home


C
F
C
G7
In our home we like to sing,
La, la, la, la, la,
C
C
F
C
La, la, la, la, la;
Songs a- bout most an- y thing,
G7
C
La, la, la, la, la,
la

2. Singing songs makes us feel glad, La, la, la, la, la
La, la, la, la, la; We can't sing and still be sad,
La, la, la, la, la, la.

3. There's one thing that we have known, La, la, la, la, la
La, la, la, la, la; Singing makes a happy home,
La, la, la, la, la, la.

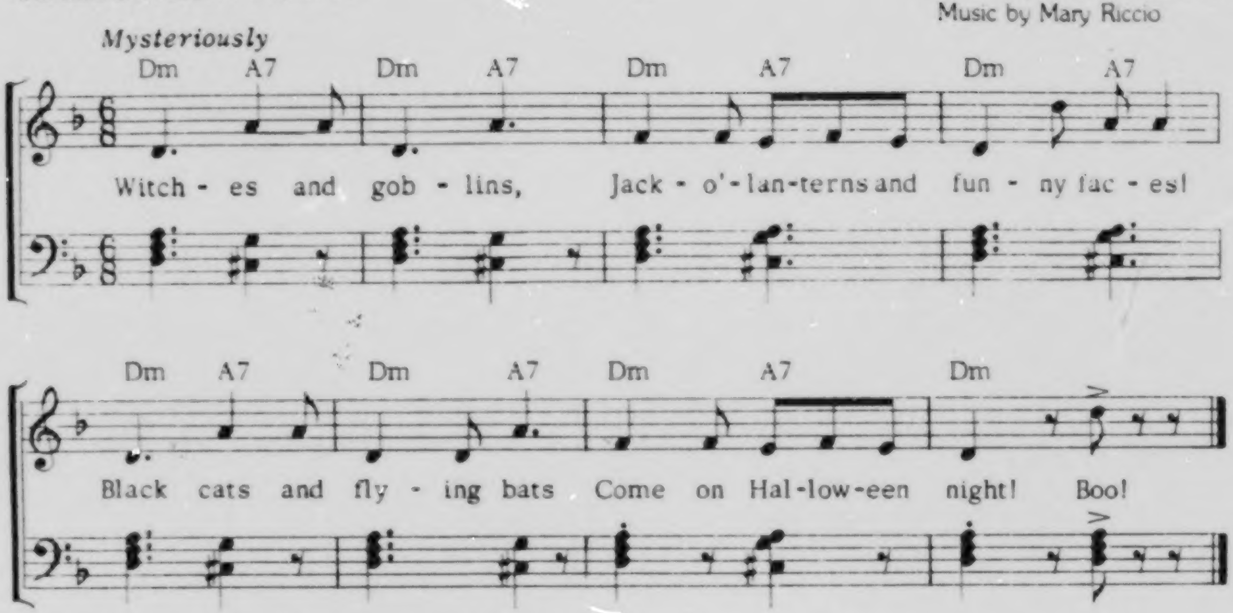
MACUS Songsheet.

HOLIDAY SONGS

Title:	See individual selections
General Objective:	To sing songs about Halloween, Thanksgiving, (including Indians), Christmas, and Valentine's Day
Materials Needed:	Tape recorder Seasonal pictures and items which have holiday appeal - false faces, pumpkins, Indian tom-tom drums, feathers, bells, holly, red hearts, etc.
General Procedure:	Sing song with no (or very light) accompaniment. Repeat words as verse, demonstrating any action and/or movement. Teach unfamiliar words by asking leading questions and guiding the responses. Have children repeat words as verse, using actions and/or movement. Have children sing song, using actions and/or movement, and using any pictures, etc., listed in "Materials Needed". Tape record and play back when song is familiar enough to children.
Evaluation:	Observe participation. Listen to tape recording.

HALLOWEEN NIGHT

Words by Lou Ann Hatcher
Music by Mary Riccio


Mysteriously
Dm A7 Dm A7 Dm A7 Dm A7
Witch - es and gob - lins, Jack - o'-lan-terns and fun - ny fac - es!
Dm A7 Dm A7 Dm A7 Dm
Black cats and fly - ing bats Come on Hal-low-een night! Boo!

From MUSIC FOR YOUNG AMERICANS, K. © 1959 American Book Company. Reprinted by permission.

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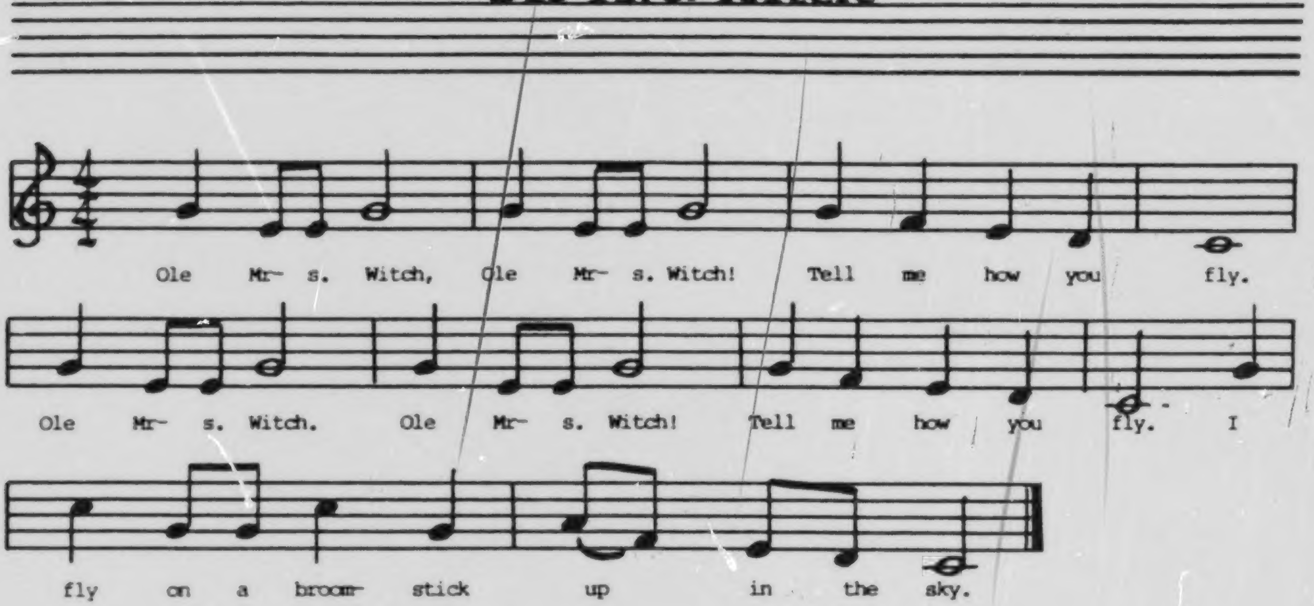
2. Ole Mrs. Witch, Ole Mrs. Witch!
Tell me what you see
(repeat)
I see a little jack-o-latern
Looking up at me!

3. Ole Mrs. Witch, Ole Mrs. Witch!
Tell me what you do.
(repeat)
I ride on my broom stick
And I scare you! (Boo!)

Ole Mrs. Witch


Ole Mr- s. Witch, Ole Mr- s. Witch! Tell me how you fly.
Ole Mr- s. Witch. Ole Mr- s. Witch! Tell me how you fly. I
fly on a broom- stick up in the sky.

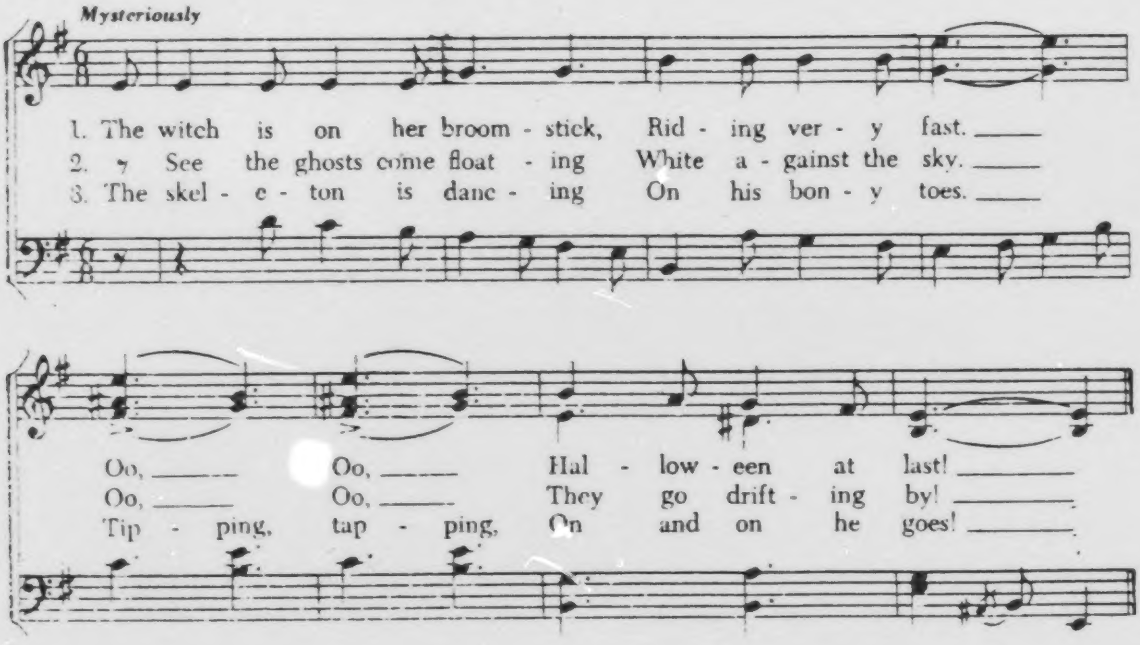
MACUS Songsheet.

Additional Objective: To act the part of witch, ghost, skeleton, and trick-or-treater as song is sung

Additional Evaluation: Observe whether children act the parts of witch, ghost, skeleton, and trick-or-treater as song is sung.

The Witch Rides

Words and Music by Grace M. Meserve Verses 2-4 by Mary Jaye

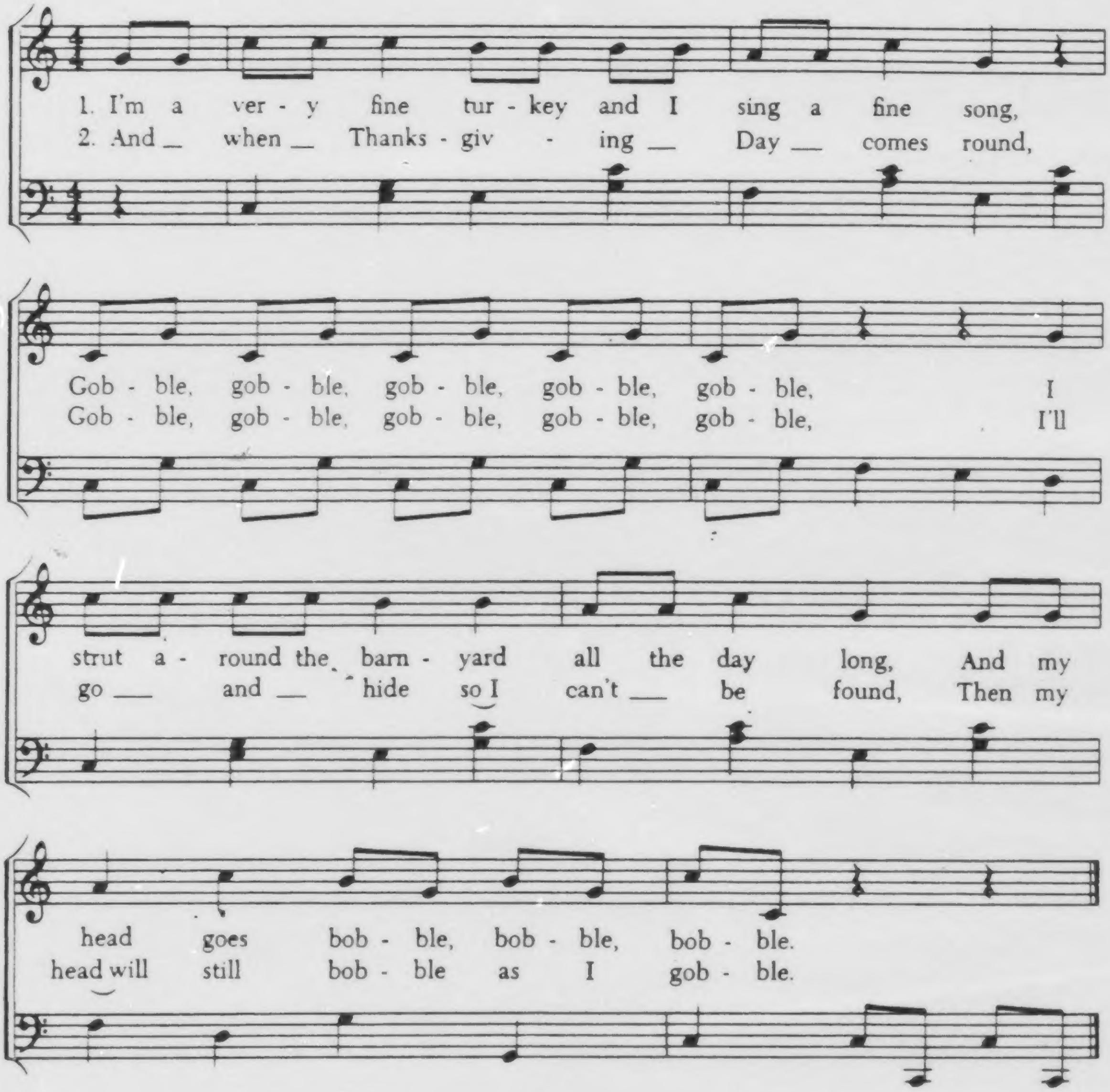

Mysteriously
1. The witch is on her broom - stick, Rid - ing ver - y fast.
2. See the ghosts come float - ing White a - gainst the sky.
3. The skel - e - ton is danc - ing On his bon - y toes.
Oo, Oo, Hal - low - een at last!
Oo, Oo, They go drift - ing by!
Tip - ping, tap - ping, On and on he goes!

4. See the funny goblins Dancing down the street,
Knocking, knocking, Crying "Trick or treat!"

Making Music Your Own, p. 70. Used by Permission. Silver Burdett Co.

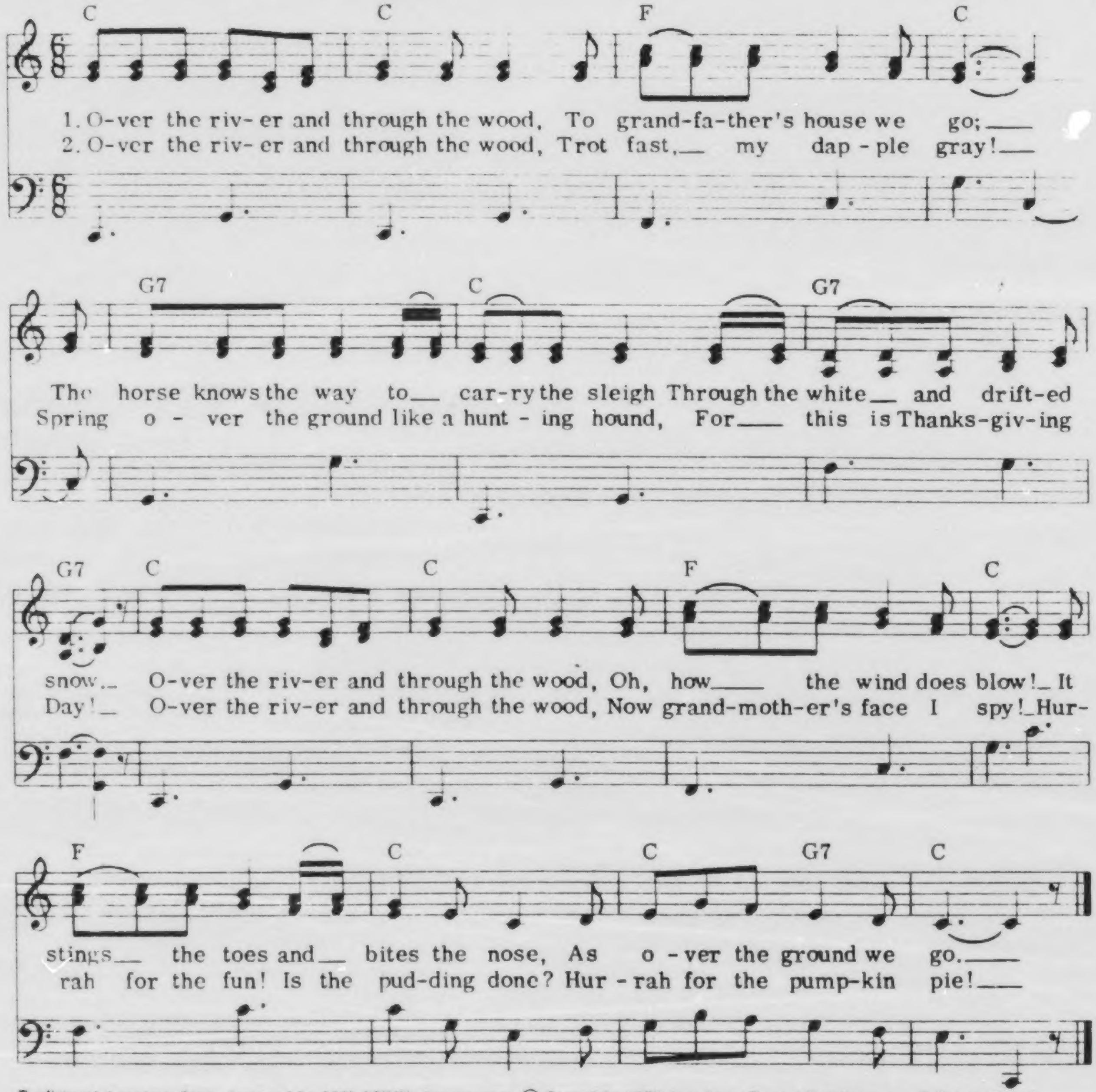
I'm a Very Fine Turkey

Words and Music by Lillian Wiedman


1. I'm a ver - y fine tur - key and I sing a fine song,
2. And __ when __ Thanks - giv - ing __ Day __ comes round,
Gob - ble, gob - ble, gob - ble, gob - ble, gob - ble, I
Gob - ble, gob - ble, gob - ble, gob - ble, gob - ble, I'll
strut a - round the barn - yard all the day long, And my
go __ and __ hide so I can't __ be found, Then my
head goes bob - ble, bob - ble, bob - ble.
head will still bob - ble as I gob - ble.

Making Music Your Own, p. 80. Used with Permission. Siver Burdett Co.

OVER THE RIVER


C C F C
1. O-ver the riv-er and through the wood, To grand-fa-ther's house we go;
2. O-ver the riv-er and through the wood, Trot fast, my dap-ple gray!
G7 C G7
The horse knows the way to carry the sleigh Through the white and drift-ed
Spring o-ver the ground like a hunt-ing hound, For this is Thanks-giv-ing
G7 C C F C
snow. O-ver the riv-er and through the wood, Oh, how the wind does blow! It
Day! O-ver the riv-er and through the wood, Now grand-moth-er's face I spy! Hur-
F C C G7 C
stings the toes and bites the nose, As o-ver the ground we go.
rah for the fun! Is the pud-ding done? Hur-rah for the pump-kin pie!

Traditional American Song. Arranged by JOY LYNN. Arrangement © Copyright 1975 Broadman Press. All rights reserved. International copyright secured.

Music for Today's Children, p. 127. Used with Permission.

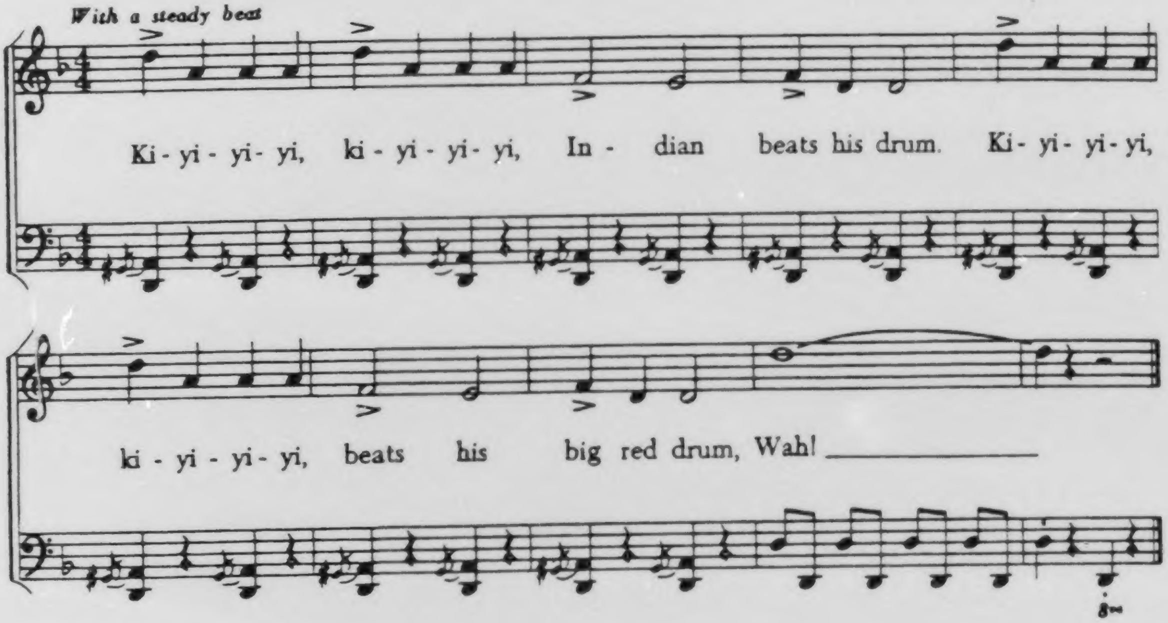
Additional Objective: To beat an "Indian" rhythm ($\overset{>}{1}$, 2, 3, 4; $\overset{>}{1}$, 2, 3, 4)

Additional Procedure: Using tom-tom drums (or edge of chair and hand or pencil) have children beat accented rhythm alone and as they sing the song.

Additonal Evaluation: Observe whether children beat the accented rhythm as suggested.

Ki-yi-yi-yi

Words and Music by Mary Blott Koch

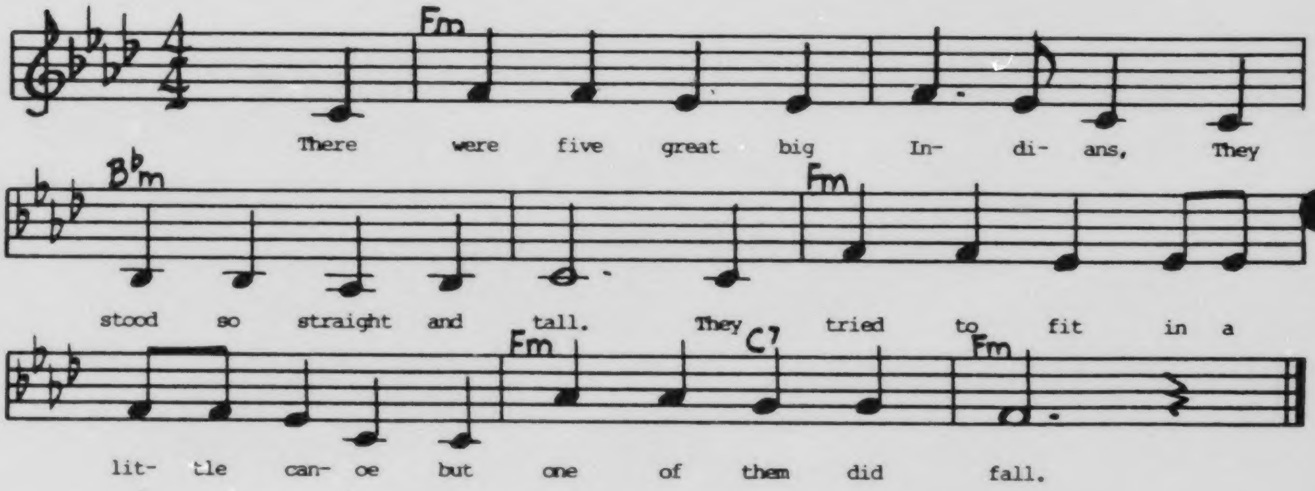

With a steady beat
Ki - yi - yi - yi, ki - yi - yi - yi, In - dian beats his drum. Ki - yi - yi - yi,
ki - yi - yi - yi, beats his big red drum, Wah!
8va

Making Music Your Own, p. 76. Used by Permission. Silver Burdett Co.

Additional Procedure: Cup one hand to form canoe - the other hand represents the "Five great big Indians", who fall one by one.

The last Indian is your pinky. He "just fits" into the canoe by slipping in the opening between the thumb and the pointer finger (downward) and "paddling" back toward the elbow.

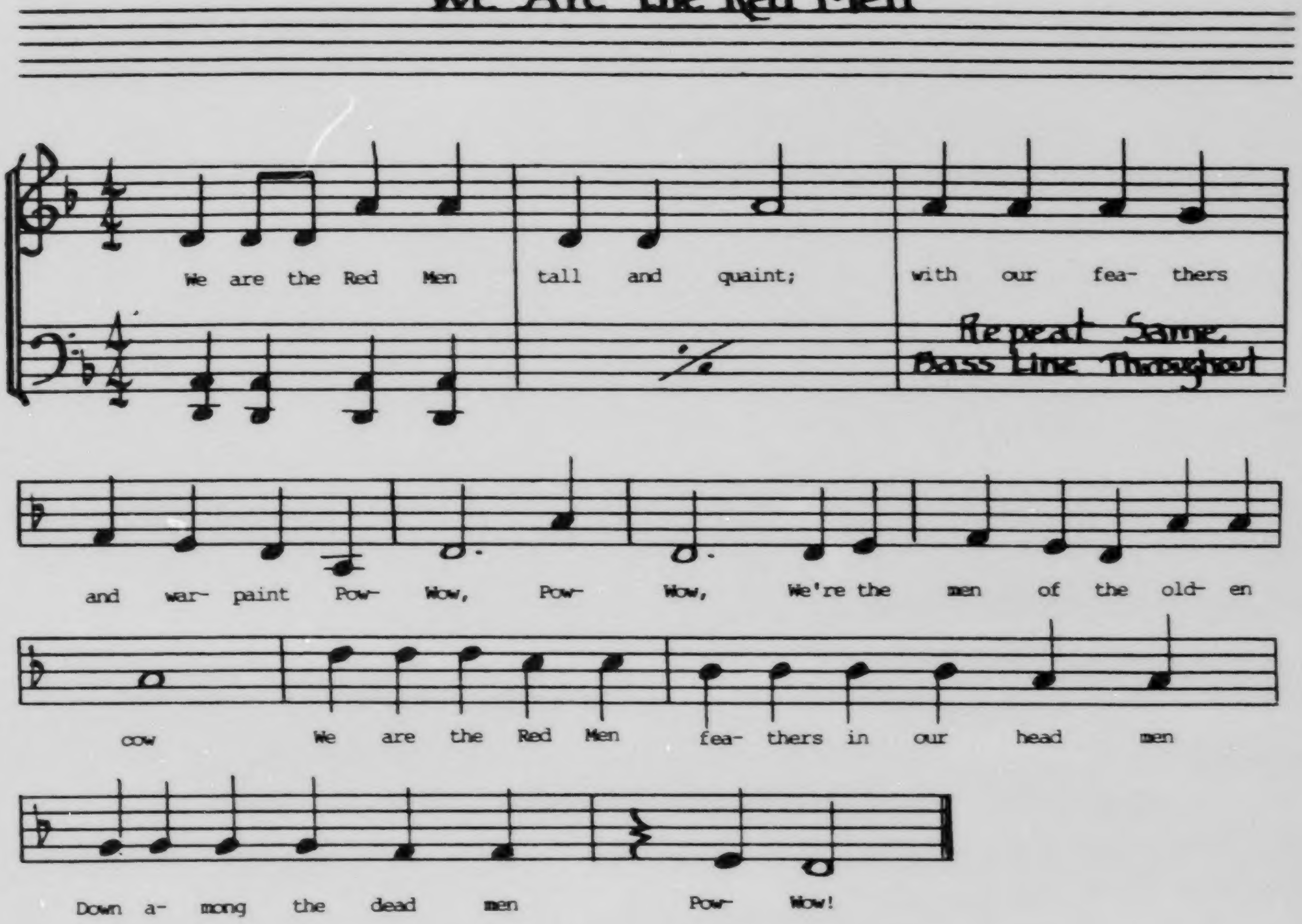
There Were Five Great Big Indians


Fm
There were five great big In- di- ans, They
B♭m
stood so straight and tall. They
Fm
tried to fit in a
lit- tle can- oe but
Fm
one of
C7
them did
Fm
fall.

2. there were four - etc.
3. there were three - etc.
4. there were two - etc
5. there was one great big Indian,
He stood so straight and tall,
And he just fit in a little canoe,
And paddled his way on home!

Additional Procedure: Have children sit cross-legged on floor with arms folded on chest--elbows raised--Indian fashion. Add ab-lib motions to go along with song.

We Are the Red Men


We are the Red Men tall and quaint; with our fea- thers
Repeat Same Bass Line Throughout
and war- paint Pow- Wow, Pow- Wow, We're the men of the old- en
cow We are the Red Men fea- thers in our head men
Down a- mong the dead men Pow- Wow!

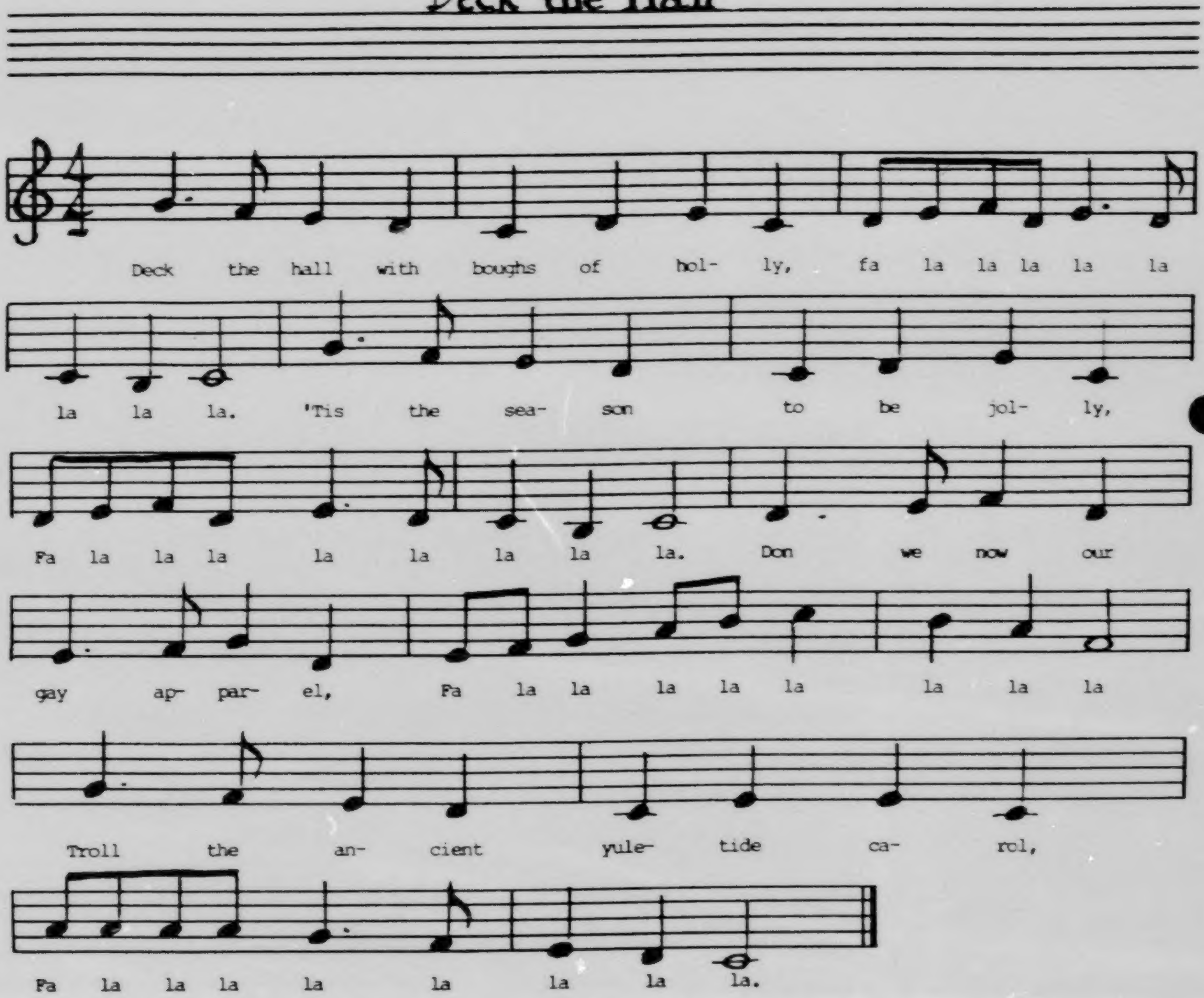
Used by Permission. Mary Dent Deaton

Additional Procedure: Some children have enjoyed learning this paraphrase of the old-fashioned words in this song. Teach it, if you wish.

Let's decorate this place with some holly branches
'Cause it's Christmastime! BE HAPPY!
And let's put on our pretty Christmas clothes
And sing some of those good ole Christmas songs!

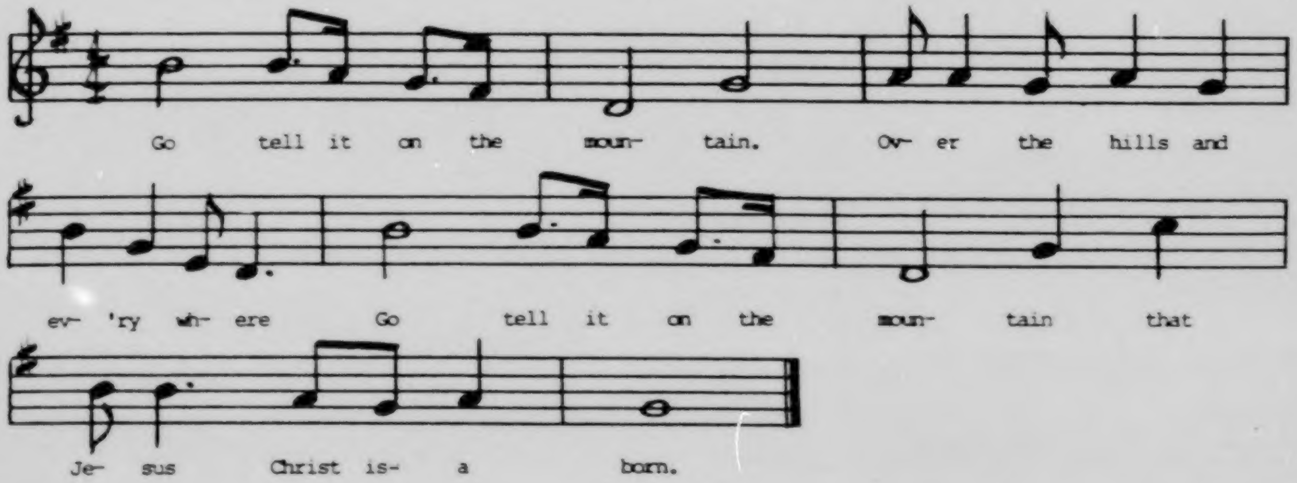
(It DOES NOT fit the song--just fun to say!)

Deck the Hall


Deck the hall with boughs of hol- ly, fa la la la la la la la la.
'Tis the sea- son to be jol- ly,
Fa la la la la la la la la.
Don we now our gay ap- par- el,
Fa la la la la la la la la.
Troll the an- cient yule- tide ca- rol,
Fa la la la la la la la la.

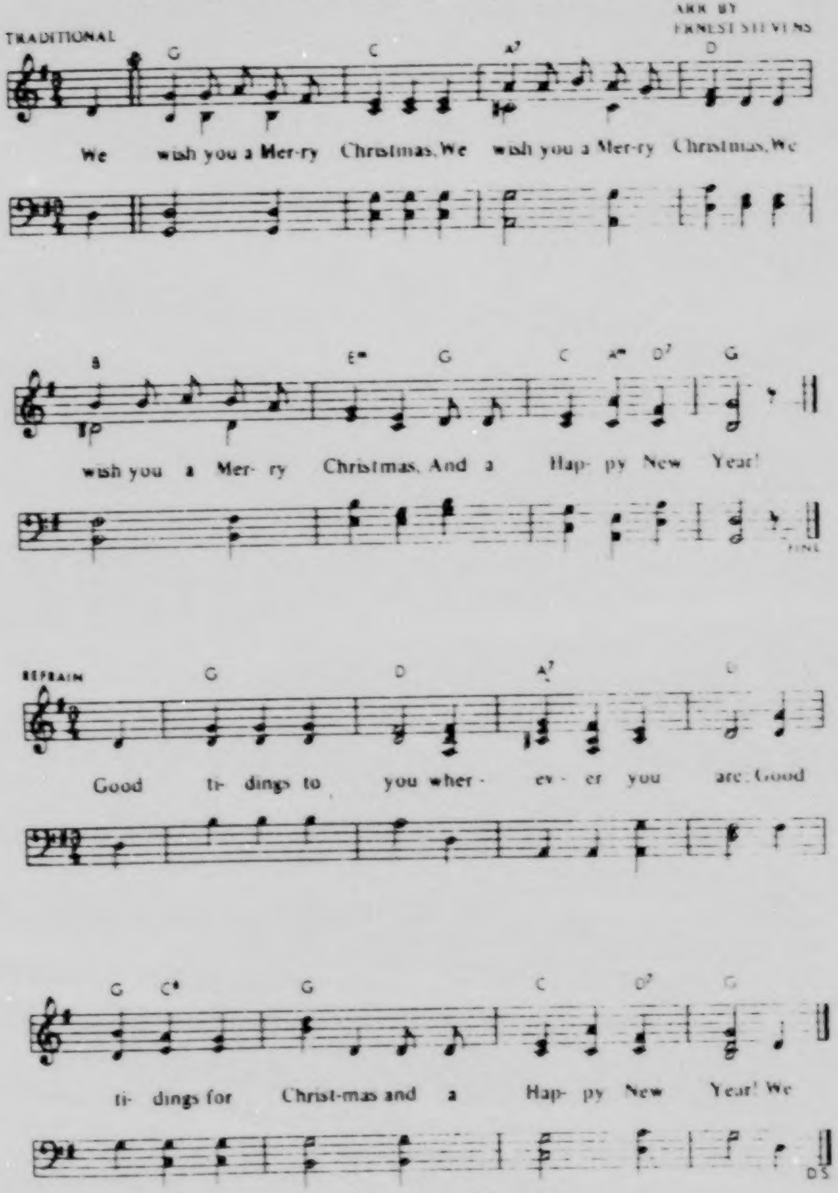
Contributed by Martha McBryde.

Go Tell It On the Mountain


Go tell it on the moun- tain. Ov- er the hills and
ev- 'ry wh- ere Go tell it on the moun- tain that
Je- sus Christ is- a born.

Contributed by Martha McBryde.

We Wish You A Merry Christmas

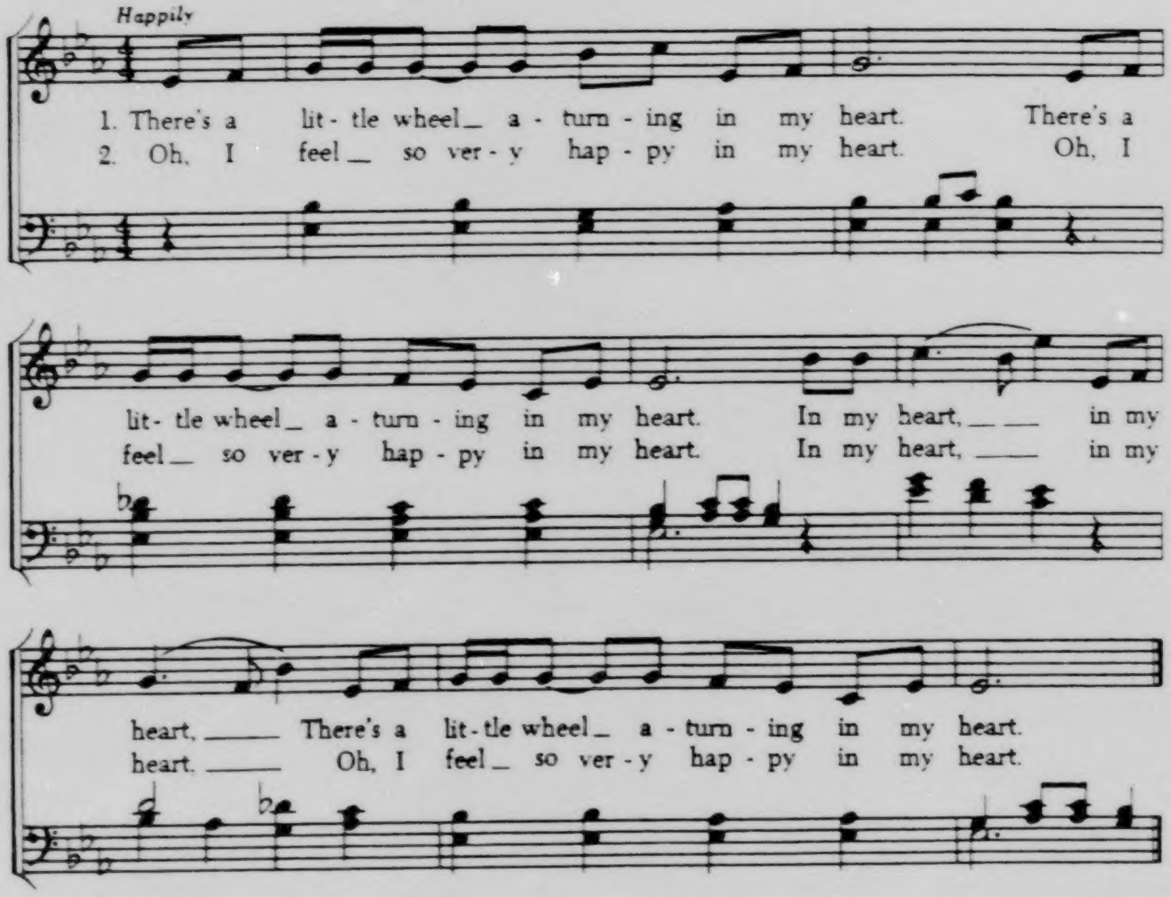

TRADITIONAL
ARR BY
ERNEST STEVENS
G C A7 D
We wish you a Mer-ry Christmas, We wish you a Mer-ry Christmas, We
Em G C Am D7 G
wish you a Mer- ry Christmas, And a Hap- py New Year!
FINE
REFRAIN
G D A7 D
Good ti- dings to you wher- ev- er you are; Good
G C# G C D7 G
ti- dings for Christ-mas and a Hap- py New Year! We
DS

Songs of Christmas. Used with Permission. Economics Press

There's a Little Wheel

Negro Spiritual

Arranged by Georgette LeNorth


Happily
1. There's a lit - tle wheel _ a - turn - ing in my heart. There's a
2. Oh, I feel _ so ver - y hap - py in my heart. Oh, I
lit - tle wheel _ a - turn - ing in my heart. In my heart, _ in my
feel _ so ver - y hap - py in my heart. In my heart, _ in my
heart, _ There's a lit - tle wheel _ a - turn - ing in my heart.
heart. _ Oh, I feel _ so ver - y hap - py in my heart.

Making Music Your Own, p. 127, 1971.
Used with Permission. Silver Burdett Co.

Additional Objective: To play a game identifying classmates' voices

Additional Procedure: Have one child be "it" and sit with back to group

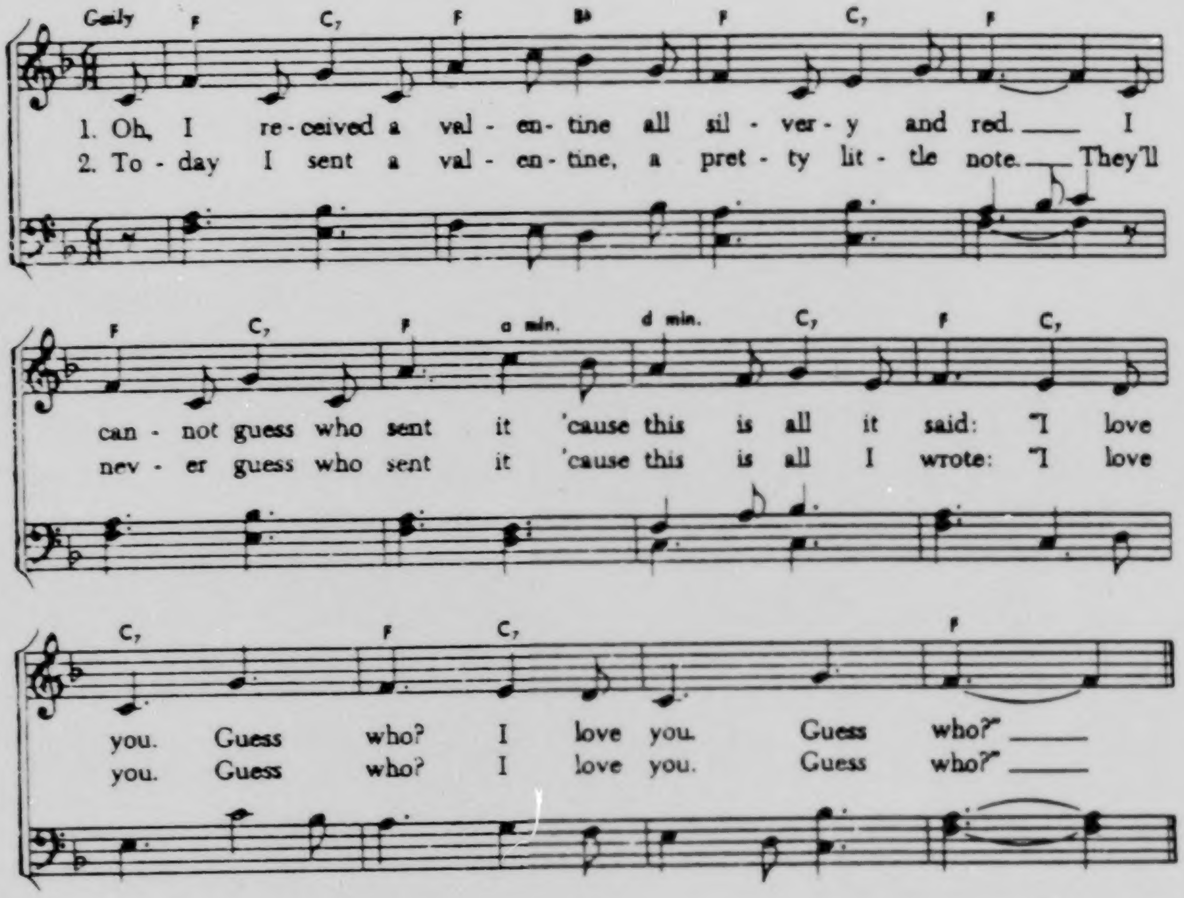
Group sings song to "...it said:..." - then teacher points to a soloist to finish the song, "I love you, guess who? I love you, guess who?"

"It" tries to guess who "sent" the valentine

Additional Evaluation: Observe whether children can identify classmates voices when they are "it"

Valentine's Day

Words and Music by Lolly Williams



Gaily
F C7 F B♭ F C7 F
1. Oh, I re-ceived a val-en-tine all sil-ver-y and red. I
2. To-day I sent a val-en-tine, a pret-ty lit-tle note. They'll
F C7 F a min. d min. C7 F C7
can-not guess who sent it 'cause this is all it said: "I love
nev-er guess who sent it 'cause this is all I wrote: "I love
C7 F C7 F
you. Guess who? I love you. Guess who?"
you. Guess who? I love you. Guess who?"

Making Music Your Own, p. 124.
Used by Permission. Silver Burdett Co.

NUMBERS/LETTERS/COLORS/SHAPES/DIRECTIONS

Title: See individual selections

General Objectives:

To sing songs about numbers, letters, colors, shapes, and directions

To identify the things about which the songs tell when shown flash cards, objects, pictures, etc.

Materials Needed:

Cut-outs, flash cards, items of various shapes and colors, arrows pointing left and right, etc.

Tape recorder

General Procedure:

Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using any action and/or movement.

Have children sing song, using actions and/or movement, and using any pictures, props, etc., listed in "Materials Needed".

Tape record and play back when song is familiar enough to children.

Evaluation:

Observe participation.

Observe whether children are able to identify things about which the songs tell when shown flash cards, objects, picutes, etc.

Listen to tape recording.

Make a checklist of children's names and record who need help recognizing numbers, letters, colors, shapes, and directions.

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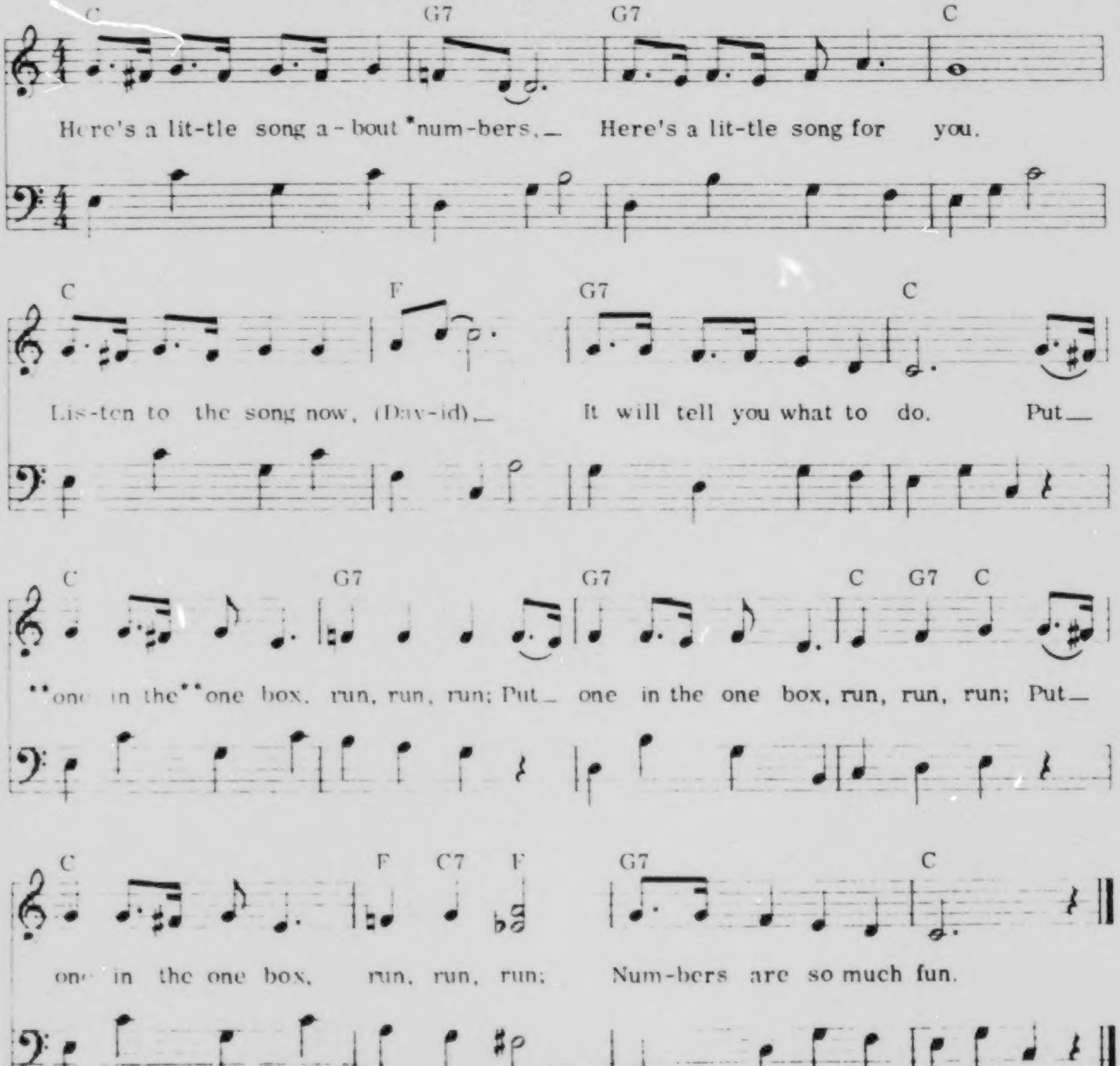
Additional Objective: To put color/number cards/items in a box marked for them at the time the song gives that direction

**Substitute colors. **Substitute three, four, five, etc. or blue, red, green, etc.*

Additional Materials Needed: Boxes (covered shoe boxes are good) with various numbers/colors clearly pictured on them - (One box is enough if you affix the different symbols in a way that they can be changed.)

Additional Procedure: Instruct children to perform the action the song says when his/her name is called.

Additional Evaluation: Observe whether children are able to put correct symbols in a box as the song directs.


C G7 G7 C
Here's a lit-tle song a-bout *num-bers, Here's a lit-tle song for you.
C F G7 C
Lis-ten to the song now, (Dav-id) It will tell you what to do. Put
C G7 G7 C G7 C
**one in the **one box, run, run, run; Put one in the one box, run, run, run; Put
C F C7 F G7 C
one in the one box, run, run, run; Num-bers are so much fun.

PERMISSION

Words and music by BILL and SHIRLEE CARNER. (C) Copyright 1975 Broadman Press. All rights reserved. International copyright secured.

Additional Materials Needed: Chart of the alphabet with pictures/drawings of the items named in the song for each letter

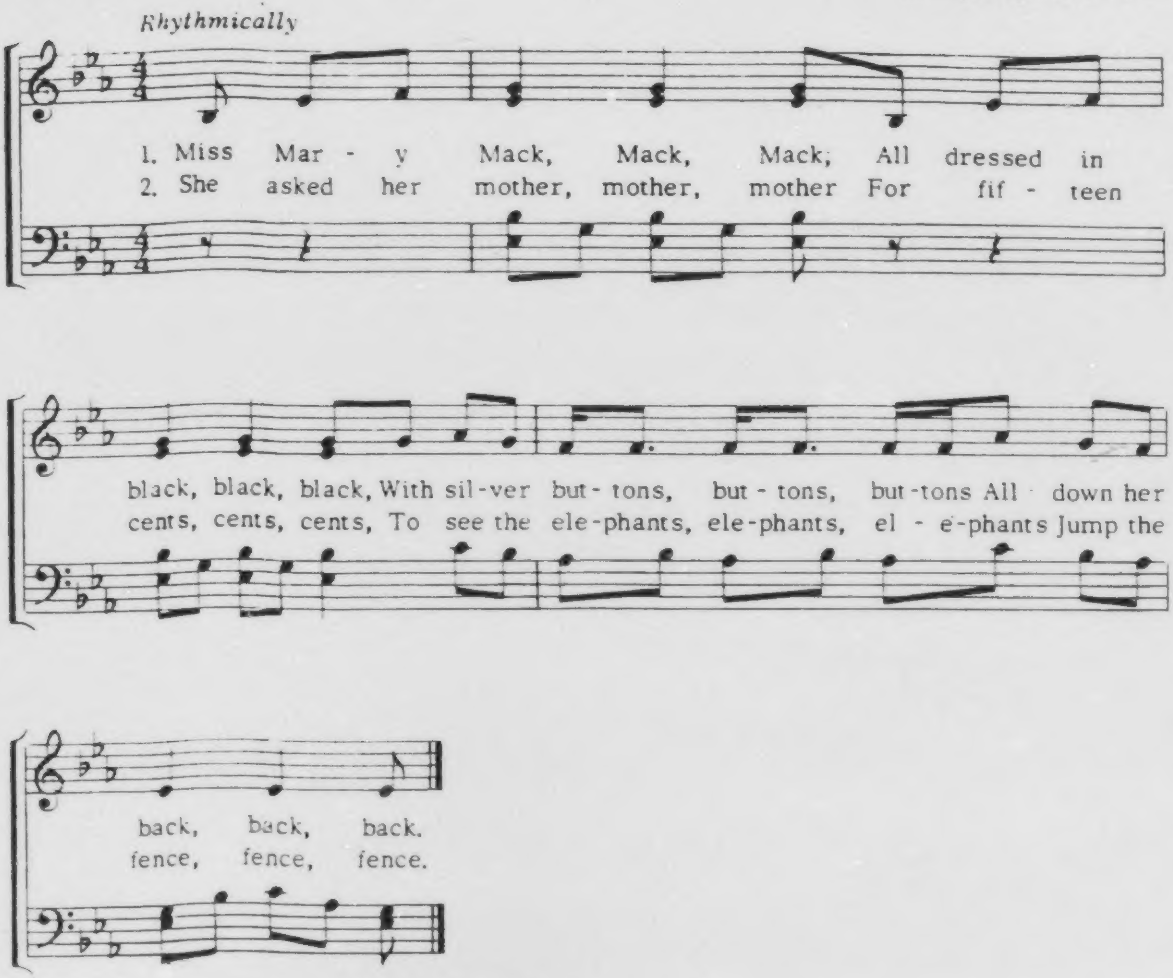
ALPHABET SONG
(Tune--"A, You're Adorable")

A is for alphabet, B is for ball and bat, C is for car that you can drive;
D is for dolly, E is for elephant; F is fish and four and five;
G is for girl that's good, H is for hat and hood, I is for ice cream on a stick;
J is for jumping rope, K is for kangaroo, L is for lollipop you can lick;
M is for man-in-moon, N is for number nine, O is for octopus, you know;
P is for pig-in-pen, Q is for quilt and queen, R is for rabbits in a row;
S is for Santa Claus, T is for all his toys, U is umbrella in the rain;
V is for Valentine, W is for wishing well, X is xylophone you play;
Now we've sung our alphabet all the way from A to X and we're happy that
we're nearly through! Now we have only two--
Y is for yellow yarn, Z is zebra in the zoo.

Original words by Mary Dent Deaton. Former Kindergarten Music Teacher

MISS MARY MACK

American Playparty Song
Arranged by Elsie Plant


Rhythmically
1. Miss Mar - y Mack, Mack, Mack, All dressed in
2. She asked her mother, mother, mother For fif - teen
black, black, black, With sil-ver but-tons, but-tons, but-tons All down her
cents, cents, cents, To see the ele-phants, ele-phants, el - e-phants Jump the
back, back, back.
fence, fence, fence.

3. They jumped so high, high, high
They reached the sky, sky, sky
They didn't come back, back, back
'Til the fourth of July, -ly, -ly.

4. Miss Linda Light, Light, Light
All dressed in white, white, white
She shined her shoes, shoes, shoes
'Til they fit to tight, tight, tight

5. Miss Dinah Dean, Dean, Dean
All dressed in green, green, green
She washed her clothes, clothes, clothes
To keep them clean, clean, clean

6. Miss Fannie Flew, Flew, Flew
All dressed in blue, blue, blue
The more she ate, ate, ate
The more she grew, grew, grew

Reaching the Special Learner Through Music, p. 167, 1979.
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NURSERY RHYMES

Title:	See individual selections
General Objective:	To sing six of the well-loved nursery rhymes
Materials Neede:	Tape recorder
General Procedure:	Explain to children that these songs have come down through the years and been sung by countless boys and girls - probably by their mothers, fathers, grandmothers, and great grandmothers, too! Sing song with no (or very light) accompaniment. Repeat words as verse, demonstrating action and/or movement. Teach unfamiliar words by asking leading questions and guiding the responses. Have children repeat words as verse, using actions and/or movement. Have children sing song, using actions and/or movement and using any instruments, flash cards and other props listed in "Materials Needed". Tape record and play back when song is familiar enough to children.
Evaluation:	Observe whether children sing the nursery rhymes. Listen to answers, comments, singing. Listen to tape recording.

NURSERY RHYMES

Baa, Baa, Black Sheep

Baa, Baa, black sheep
Have you any wool?
Yes sir, yes sir,
three bags full.
One for my master,
And one for the dame,
And one for the little boy
Who lives in the lane.

Hey, Diddle, Diddle

Hey, diddle, diddle!
The cat and the fiddle,
The cow jumped over the moon;
The little boy laughed
To see such sport
And the dish ran away with the spoon.

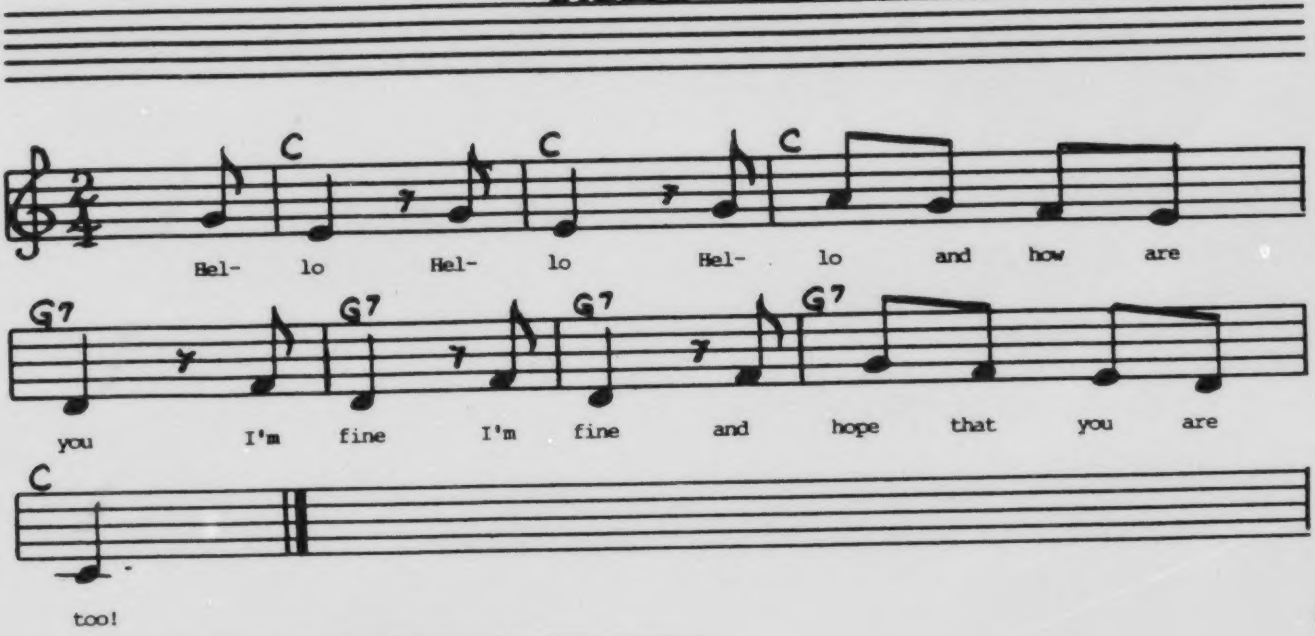
Hickory, Dickory, Dock

Hickory, dickory, dock!
The mouse ran up the clock;
The clock struck one, and the mouse ran down,
Hickory, dickory, dock!

OPENERS/HAPPY SONGS

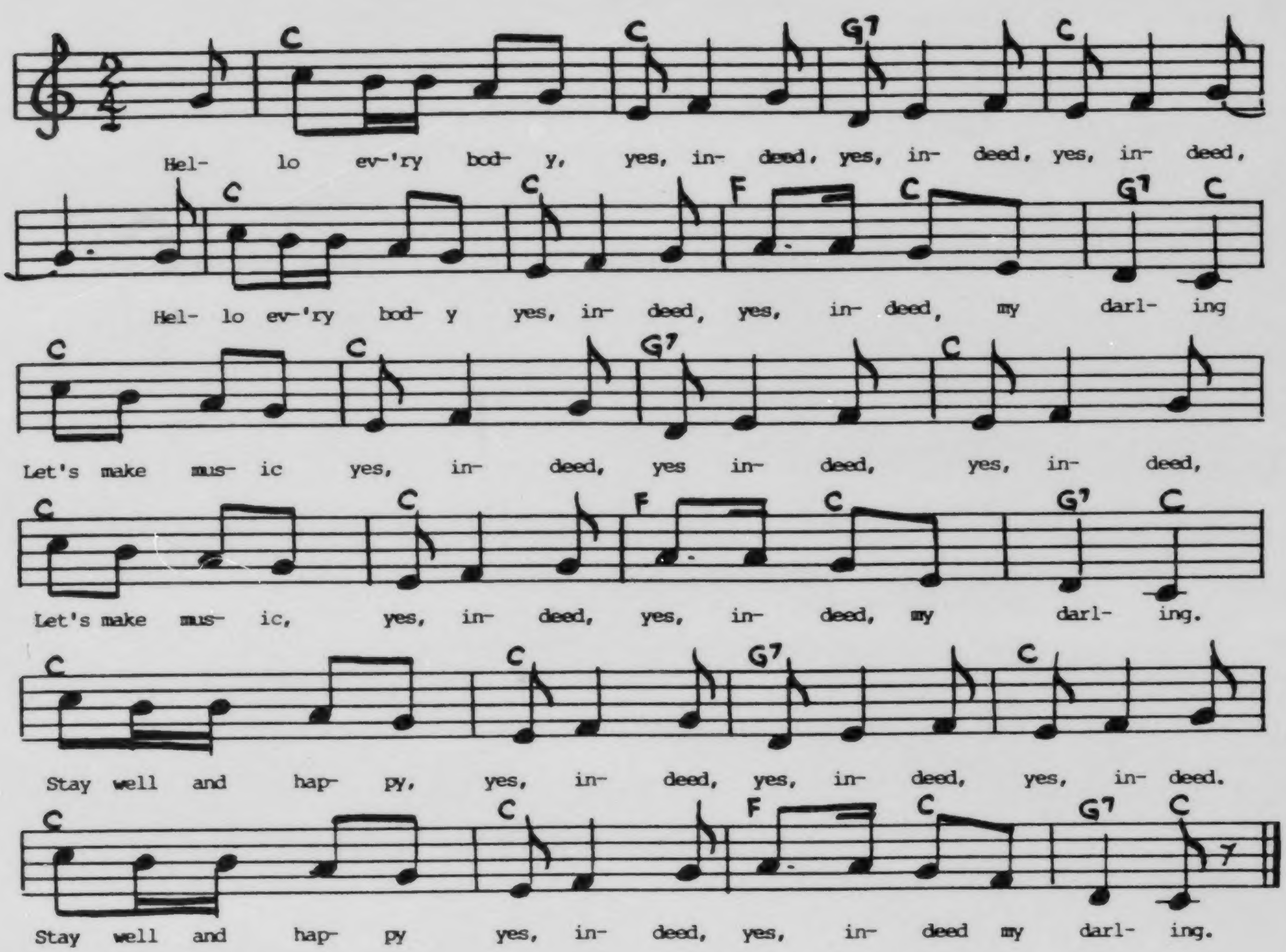
Title:	See individual selections
General Objectives:	To sing happy songs about starting the day and making music
Materials Needed:	Tape recorder
General Procedure:	Sing song with no (or very light) accompaniment. Repeat words as verse, demonstrating any action and/or movement. Teach unfamiliar words by asking leading questions and guiding the responses. Have children repeat words as verse, using actions and/or movement. Have children sing song, using any action and/or movement. Tape record and play back when song is familiar enough to children.
Evaluation:	Observe/listen to participation.

Hello


C
C
C
Hel- lo Hel- lo Hel- lo and how are
G7
G7
G7
G7
you I'm fine I'm fine and hope that you are
C
too!

Contributed by Mary Jo Cliatt.

Hello Everybody


C C G7 C
Hel- lo ev-'ry bod- y, yes, in- deed, yes, in- deed, yes, in- deed,
C C F C G7 C
Hel- lo ev-'ry bod- y yes, in- deed, yes, in- deed, my darl- ing
C C G7 C
Let's make mus- ic yes, in- deed, yes in- deed, yes, in- deed,
C C F C G7 C
Let's make mus- ic, yes, in- deed, yes, in- deed, my darl- ing.
C C G7 C
Stay well and hap- py, yes, in- deed, yes, in- deed, yes, in- deed.
C C F C G7 C
Stay well and hap- py yes, in- deed, yes, in- deed my darl- ing.

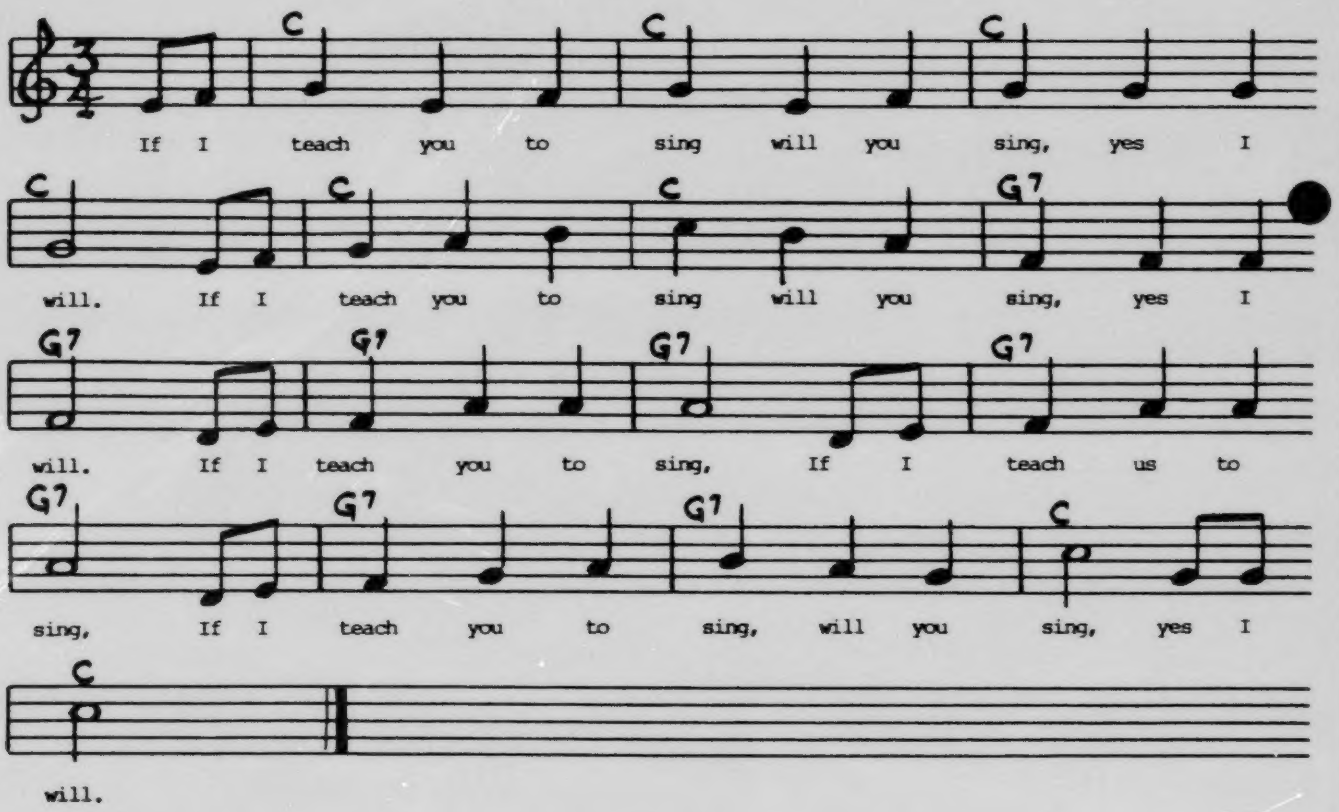
University of Mississippi Songsheet.
Contributed by Mary Jo Cliatt.

Additional Objective: To sing a song with phrases alternating between the teacher and the students

Additional Procedure: Instruct the children which phrases they are to sing in answer to the teacher's phrase.

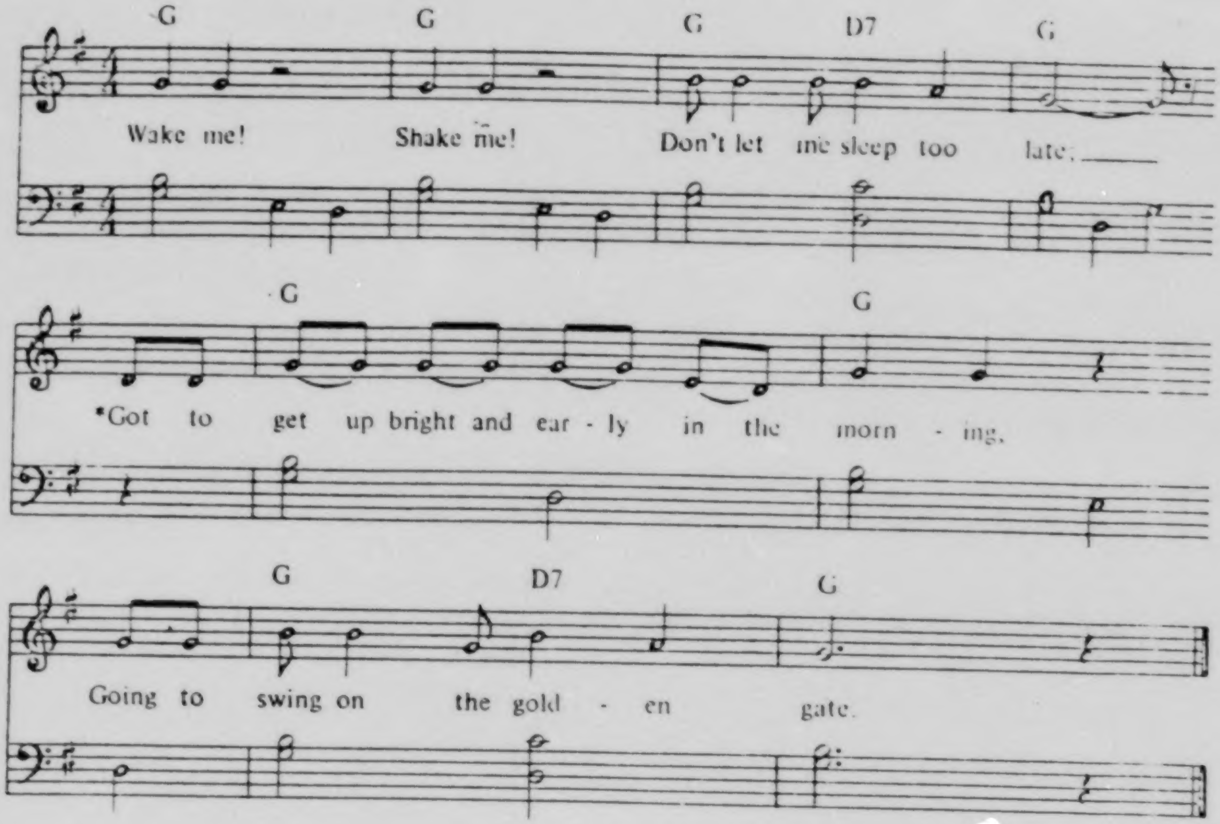
Additional Evaluation: Observe whether children sing the proper phrases in alternating sequence with the teacher.

If I Teach You To Sing


C C C
If I teach you to sing will you sing, yes I
C C C G7
will. If I teach you to sing will you sing, yes I
G7 G7 G7 G7
will. If I teach you to sing, If I teach us to
G7 G7 G7 C
sing, If I teach you to sing, will you sing, yes I
C
will.

University of Mississippi Songsheet.
Contributed by Mary Jo Cliatt.

WAKE ME, SHAKE ME


G
G
G
D7
G
Wake me! Shake me! Don't let me sleep too late; ___
G
G
*Got to get up bright and ear - ly in the morn - ing,
G
D7
G
Going to swing on the gold - en gate.

*Substitute: *Got to comb my hair this morning; Got to brush my teeth this morning; Got to dress myself this morning.*

From *Sharing Music*, Music for Young Americans series. Copyright 1966 by American Book Company. Used by permission.

PATRIOTIC AND PROVINCIAL SONGS

Title: See individual selections

General Objective To sing songs of patriotism and songs of our region

Materials Needed: Tape recorder

Maps or cutouts of states, globe, flag, etc.

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using actions and/or movement.

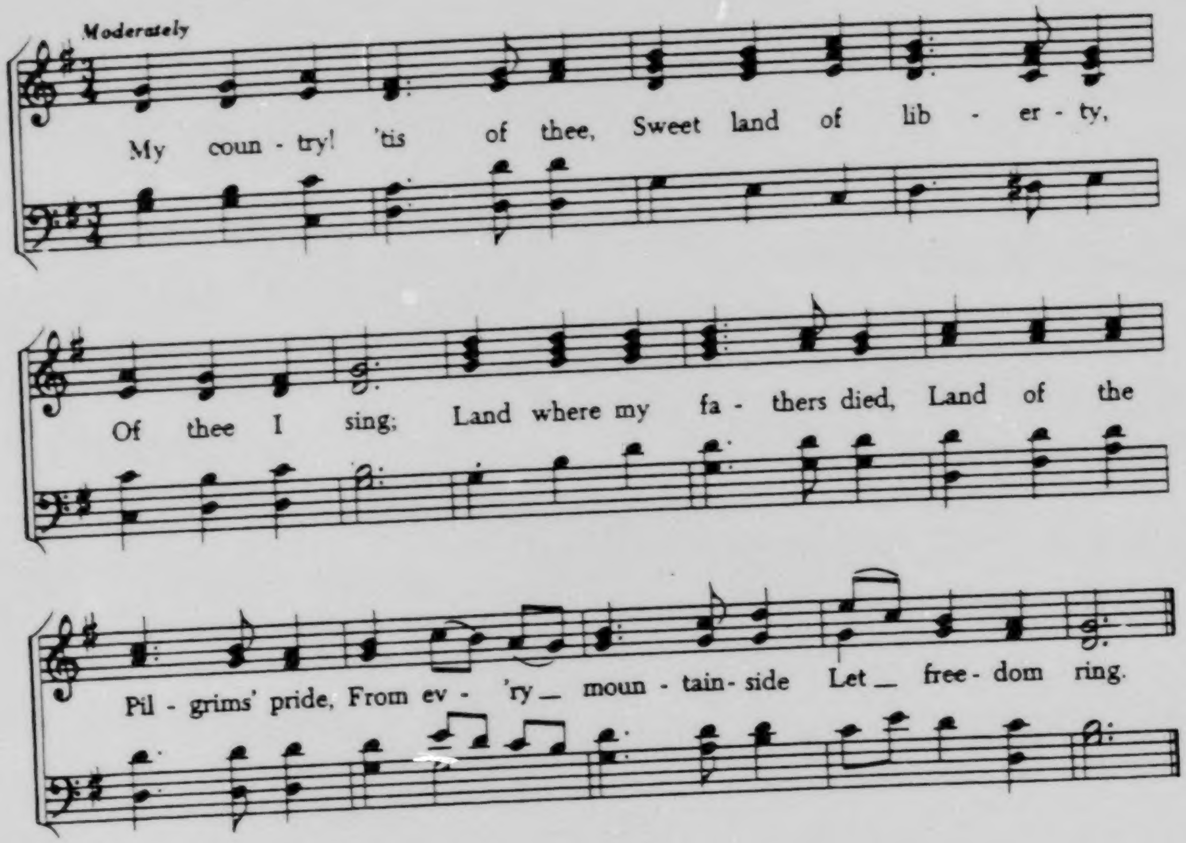
Have children sing song, using actions and/or movement, and using map, flag or other materials named above.

Tape record and play back when song is familiar enough to children.

Evaluation: Observe/listen to participation.

America

Samuel Francis Smith   Henry Carey


Moderately
My coun - try! 'tis of thee, Sweet land of lib - er - ty,
Of thee I sing; Land where my fa - thers died, Land of the
Pil - grims' pride, From ev - 'ry _ moun - tain - side Let _ free - dom ring.

Making Music Your Own, p. 117, 1971.
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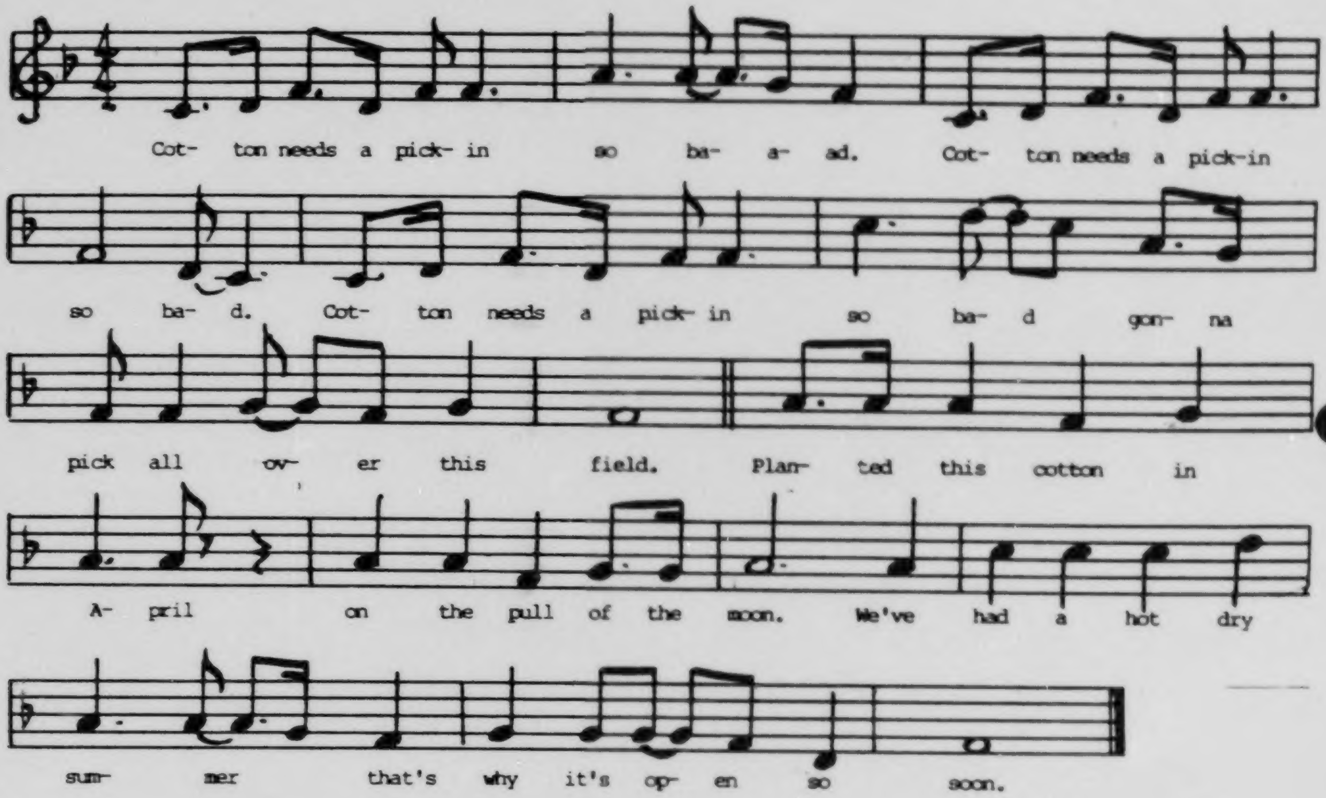
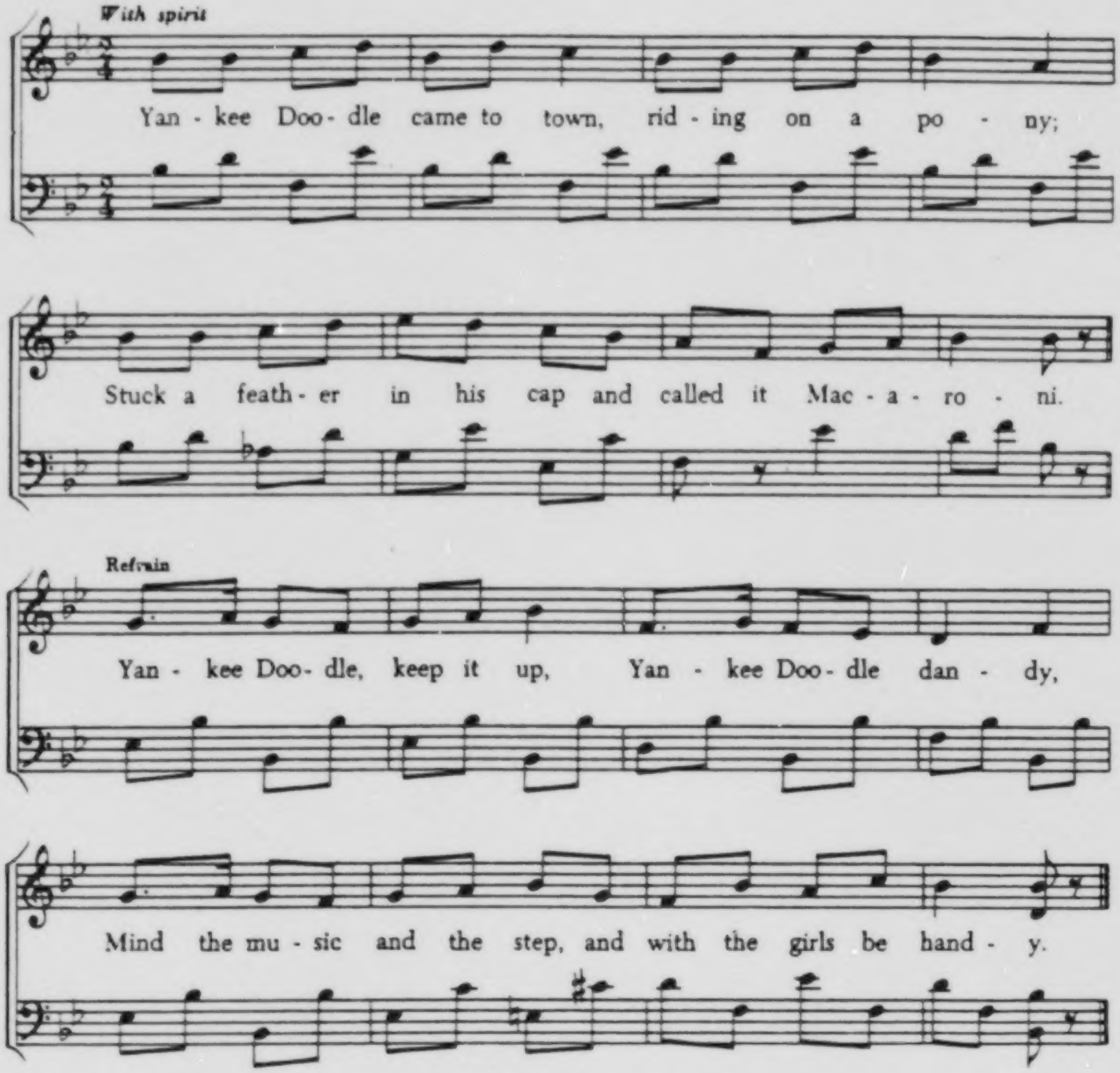
Cotton Needs A Pickin'


Cot- ton needs a pick- in so ba- a- ad. Cot- ton needs a pick-in
so ba- d. Cot- ton needs a pick- in so ba- d gon- na
pick all ov- er this field. Plan- ted this cotton in
A- pril on the pull of the moon. We've had a hot dry
sum- mer that's why it's op- en so soon.

2. Hurry up, hurry up, children
We ought to have been gone
This weather looks so cloudy
I think it's going to storm!

Yankee Doodle

Traditional
Arranged by William Ward


With spirit
Yan - kee Doo - dle came to town, rid - ing on a po - ny;
Stuck a feath - er in his cap and called it Mac - a - ro - ni.
Refrain
Yan - kee Doo - dle, keep it up, Yan - kee Doo - dle dan - dy,
Mind the mu - sic and the step, and with the girls be hand - y.

NOTE: George Washington enjoyed this song!

Making Your Own Music, p. 121, 1971.
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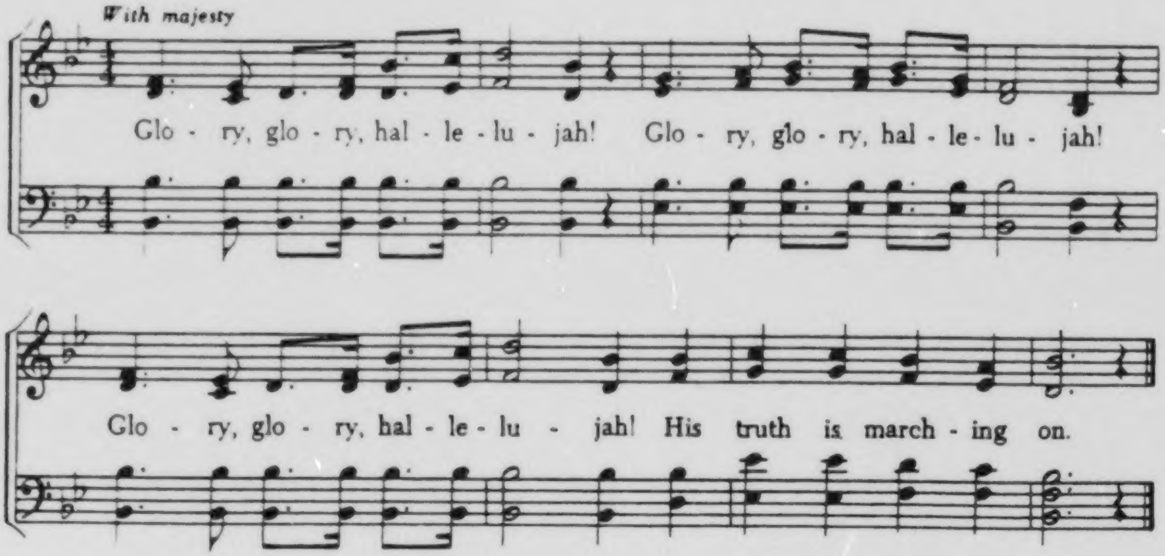
Additional Materials Needed: Rhythm instruments - drum and cymbal

Additional Procedure: When song is learned well, let children take turns being the instrumentalist while others sing and/or march.

Glory, Glory, Hallelujah!

Julia Ward Howe William Steffe


With majesty
Glo - ry, glo - ry, hal - le - lu - jah! Glo - ry, glo - ry, hal - le - lu - jah!
Glo - ry, glo - ry, hal - le - lu - jah! His truth is march - ing on.

NOTE: This song was sung during the time Abraham Lincoln was President.

Making Music Your Own, p. 119.
Used by Permission. Silver Burdett Co.

Title: "To, Mississippi"

Objective: To learn the Mississippi Official State Song as adopted by the Legislature in 1962

To learn the relationship of city, county, state and nation

To learn to spell "MS"

Procedure: See "Miss Polly Had a Dolly" for general procedure, adding:

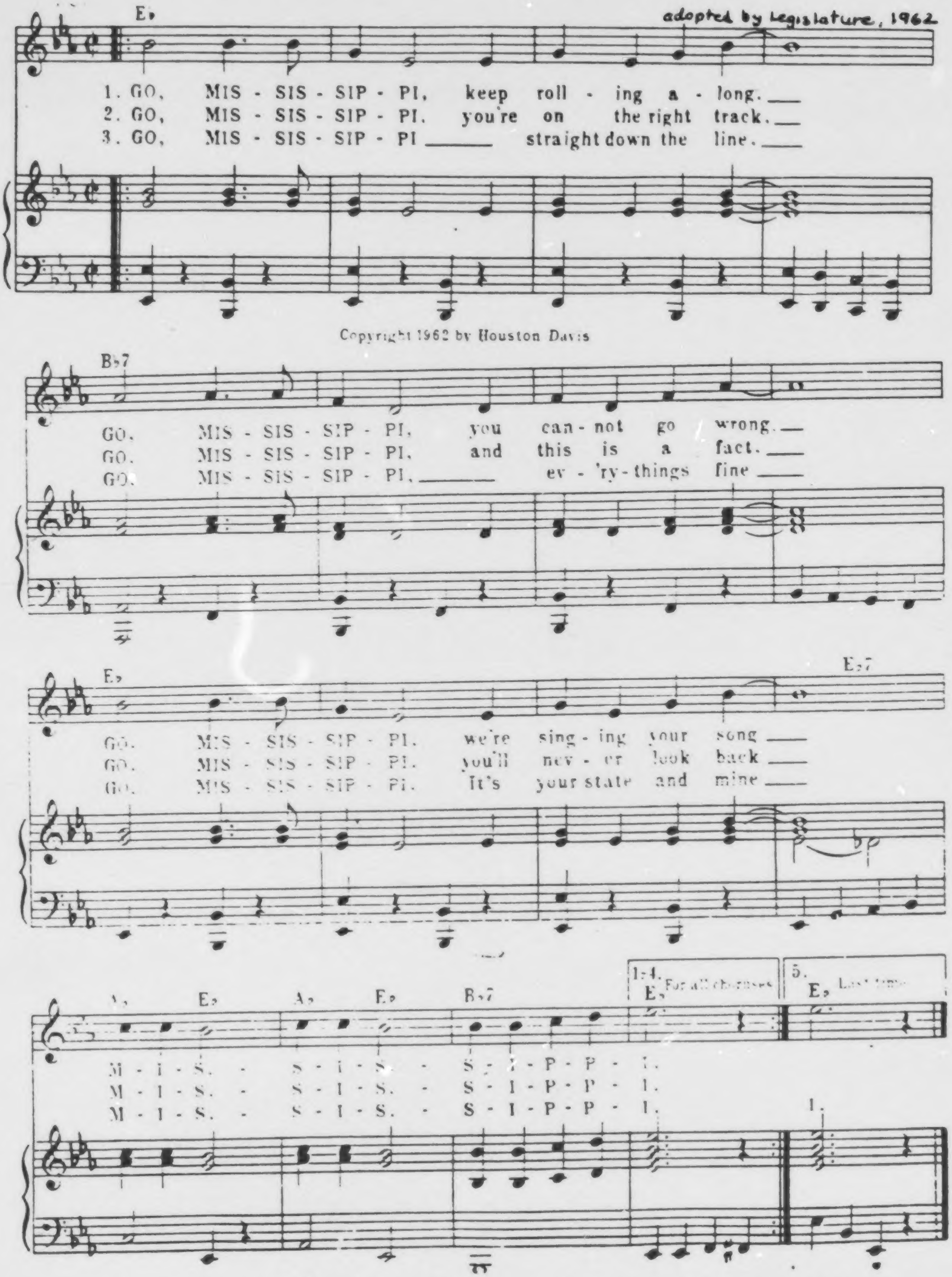
Explain the relationship of state to city, county, and nation asking them to name (or repeat) each one several times.

NOTE: Transpose song to key of C, if possible.

Evaluation: Audio-visual observation

GO MISSISSIPPI OFFICIAL STATE SONG

adopted by Legislature, 1962


E♭
1. GO, MIS - SIS - SIP - PI, keep roll - ing a - long.
2. GO, MIS - SIS - SIP - PI, you're on the right track.
3. GO, MIS - SIS - SIP - PI straight down the line.
B♭7
GO, MIS - SIS - SIP - PI, you can - not go wrong.
GO, MIS - SIS - SIP - PI, and this is a fact.
GO, MIS - SIS - SIP - PI, ev - 'ry - things fine
E♭
GO, MIS - SIS - SIP - PI, we're sing - ing your song
GO, MIS - SIS - SIP - PI, you'll nev - er look back
GO, MIS - SIS - SIP - PI, It's your state and mine
E♭7
A♭
E♭
A♭
E♭
B♭7
1-4. E♭ For all choruses
5. E♭ Last time
M - I - S. - S - I - S. - S - I - P - P - I.
M - I - S. - S - I - S. - S - I - P - P - I.
M - I - S. - S - I - S. - S - I - P - P - I.

Copyright 1962 by Houston Davis

Transpose to Key of "C")

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SCALE SONGS

Title: See individual selections

General Objective: To sing songs which ascend or descent the C scale

To sing an octave - C to C - on pitch

Materials Needed: Tape recorder

Any instrument which plays the C octave

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding the responses.

Have children repeat words as verse, using any action and/or movement.

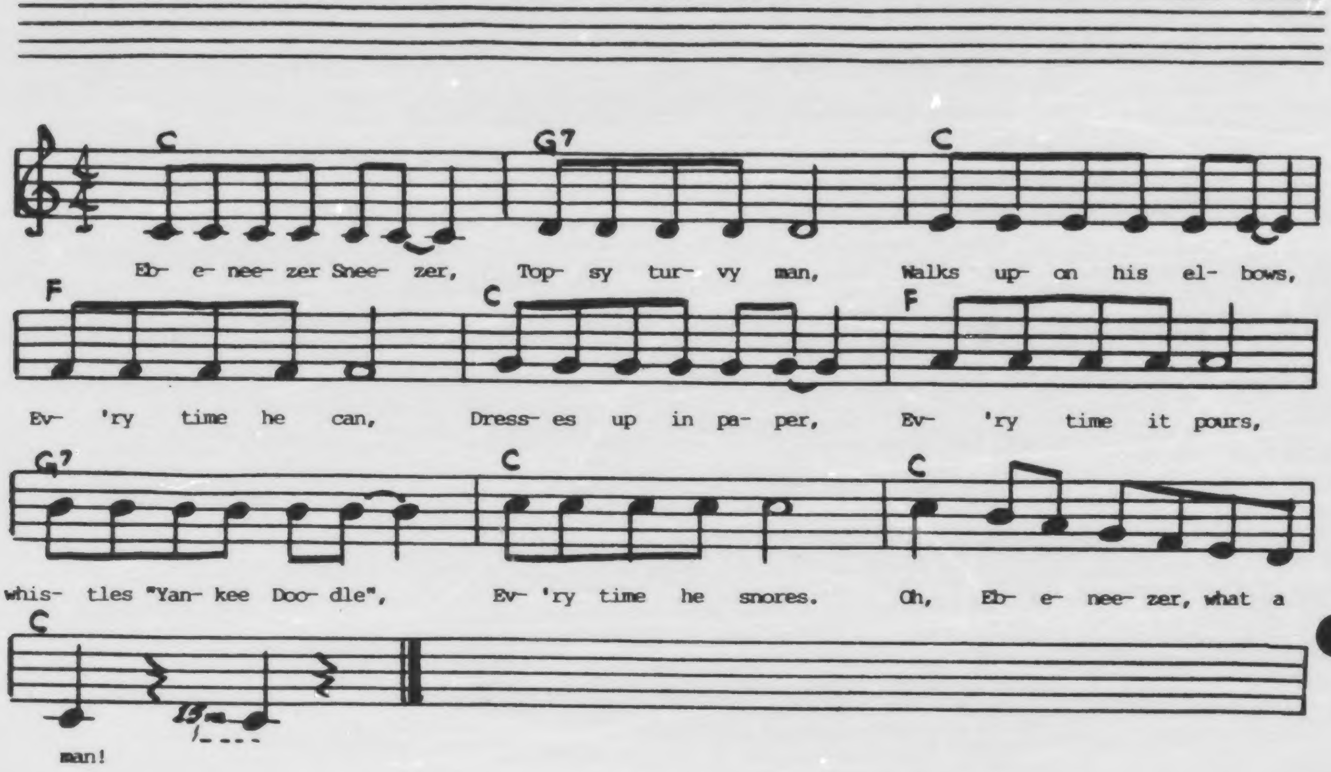
Have children sing song, using any action and/or movement and using the instruments to play scale as it is sung.

Tape record and play back when song is familiar enough to children.

Evaluation: Observe whether children can sing songs which ascent or descent the C scale and whether they sing it on pitch.

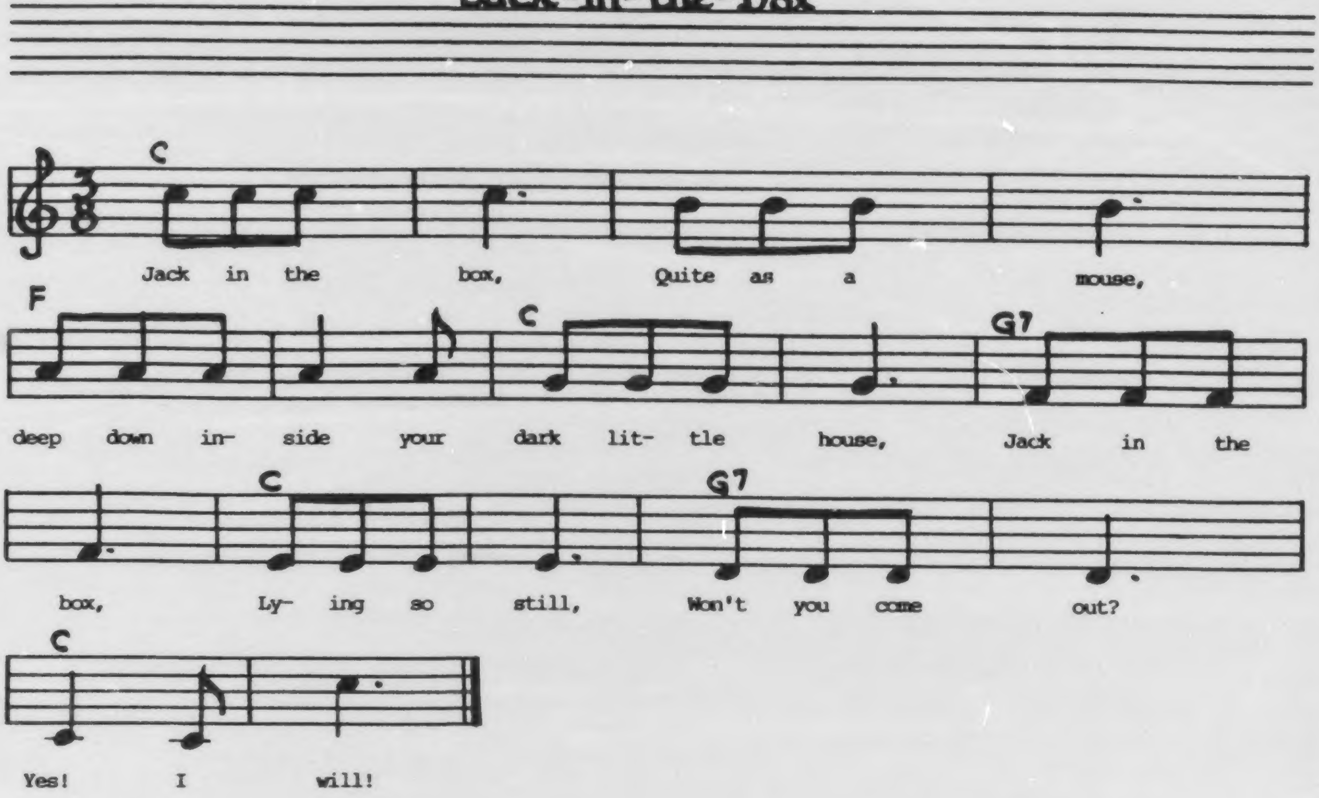
Make a checklist of children's names and record who needs help singing on pitch--REMEMBERING that many will not master this feat until they are several years older.

Ebeneezer Sneezer


C G7 C
Eb- e- nee- zer Snee- zer, Top- sy tur- vy man, Walks up- on his el- bows,
F C F
Ev- 'ry time he can, Dress- es up in pa- per, Ev- 'ry time it pours,
G7 C C
whis- tles "Yan- kee Doo- dle", Ev- 'ry time he snores. Oh, Eb- e- nee- zer, what a
C
man!

Permission Granted. MACUS Songsheet.
Contributed by Mary Jo Cliatt.

Jack-in-the-Box


C
Jack in the box, Quite as a mouse,
F
deep down in- side your
C
dark lit- tle house,
G7
Jack in the box,
C
Ly- ing so still,
G7
Won't you come out?
C
Yes! I will!

2. Seed in the ground, Still as a mouse, Deep down in-
side your dark little house, Seed in the ground,
Lying so still, Won't you come out and grow, grow, grow, grow. (etc. up the C scale)

3. Corn in the pan, Getting so hot, Deep down in-
side that little dark pot, Corn in the pan,
Lying so still, Won't you pop out? Yes! I Will!

Permission Granted, MACUS Songsheet.
Contributed by Mary Jo Cliatt.

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SONGS TO PROMOTE GOOD SELF-CONCEPT

Title: See individual selections

General Objective: To sing songs which foster good self-concept

To discuss the things that make each person unique

Materials Needed: Tape recorder

Mirror

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding responses.

Have children repeat words as verse, using any action and/or movement.

Have children sing song, using any action and/or movement, and occasionally passing the mirror around so children can SEE that unique person about whom they sing.

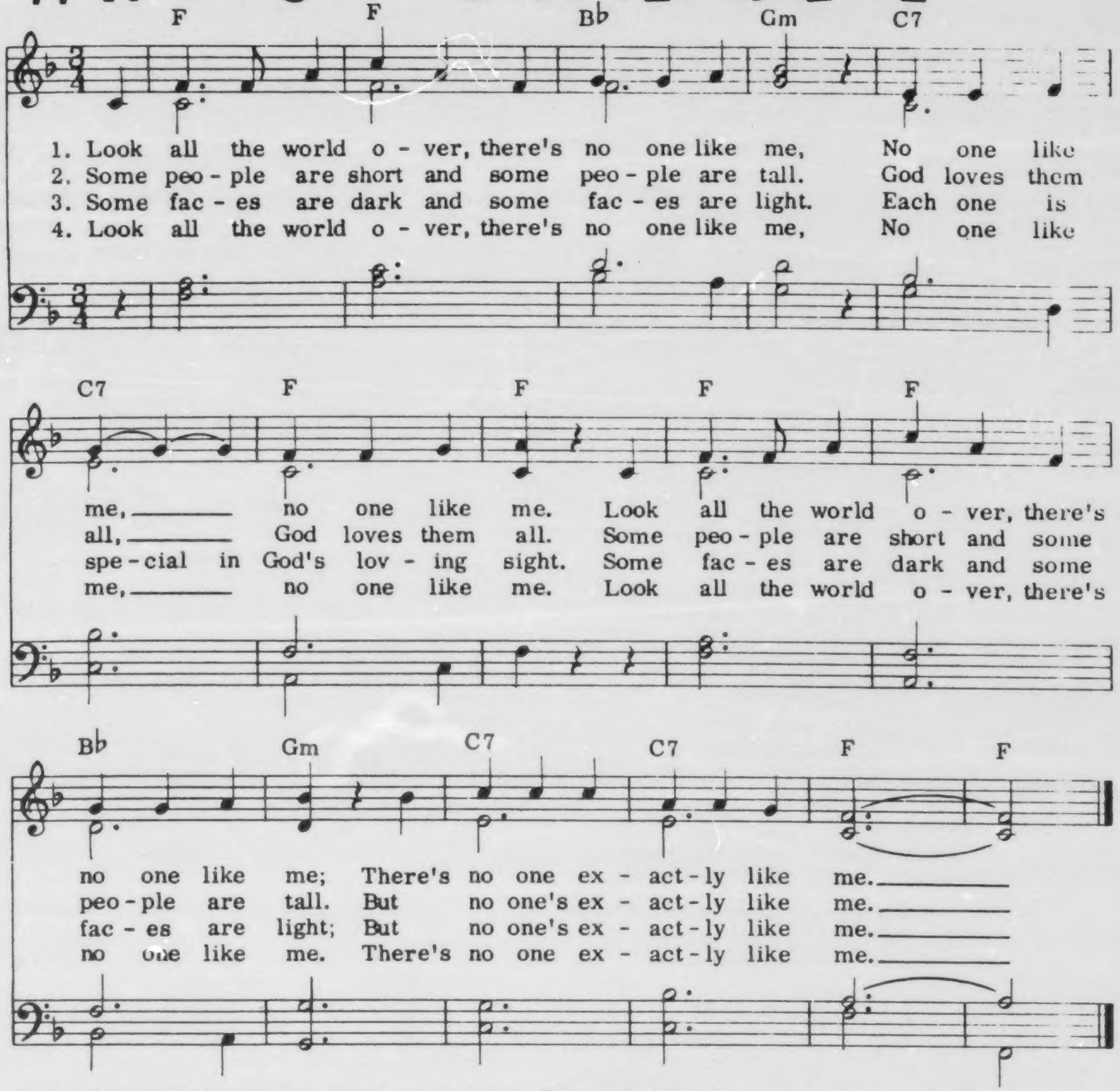
Tape record and play back when song is familiar enough to children.

General Evaluation: Observe/listen to participation.

Listen to hear whether children can identify things which make them--and others--unique.

Listen to tape recording.

THERE'S NO ONE EXACTLY LIKE ME


F F B♭ Gm C7
1. Look all the world o - ver, there's no one like me, No one like
2. Some peo - ple are short and some peo - ple are tall. God loves them
3. Some fac - es are dark and some fac - es are light. Each one is
4. Look all the world o - ver, there's no one like me, No one like
C7 F F F F
me, no one like me. Look all the world o - ver, there's
all, God loves them all. Some peo - ple are short and some
spe - cial in God's lov - ing sight. Some fac - es are dark and some
me, no one like me. Look all the world o - ver, there's
B♭ Gm C7 C7 F F
no one like me; There's no one ex - act - ly like me.
peo - ple are tall. But no one's ex - act - ly like me.
fac - es are light; But no one's ex - act - ly like me.
no one like me. There's no one ex - act - ly like me.

Words by TRILBY JORDAN. Music by BETTY ANN RAMSETH. © Copyright 1975 Broadman Press. All rights reserved. International copyright secured.

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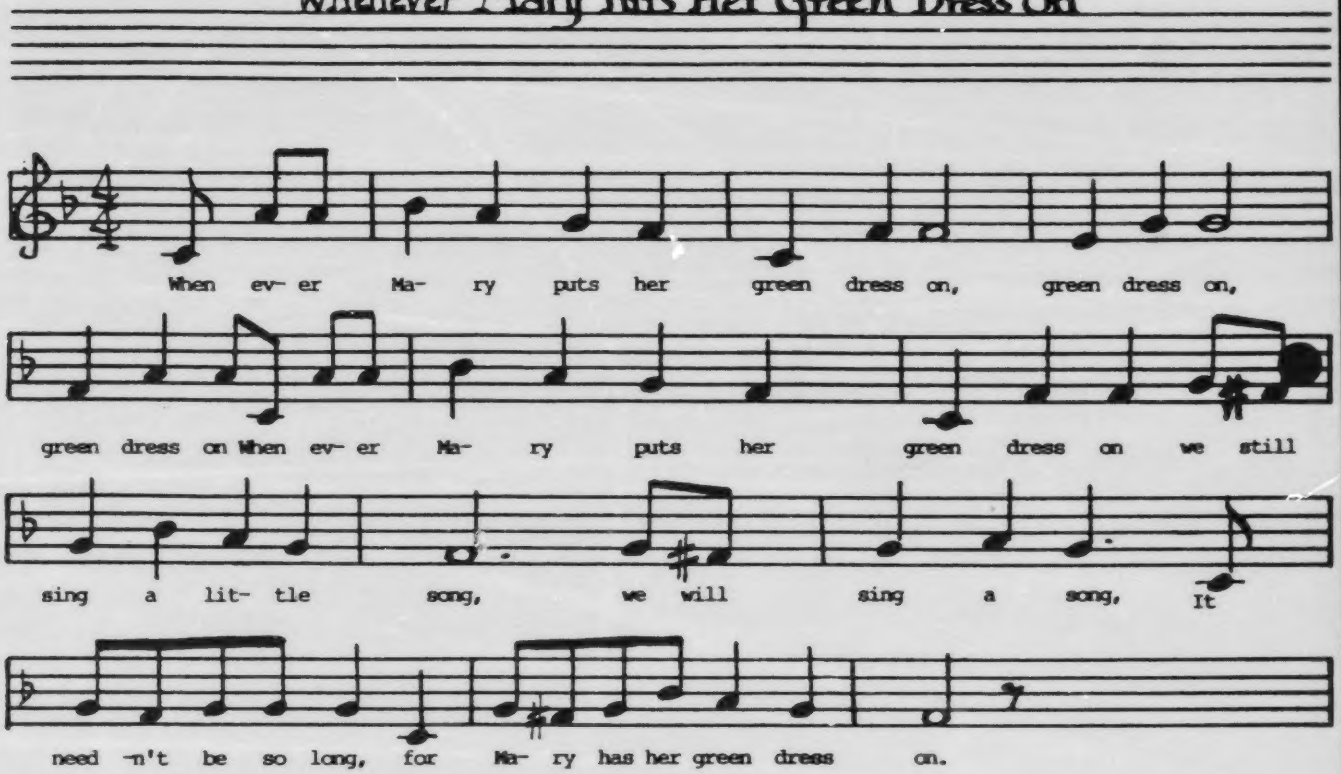
Music for Today's Children, p. 12.

Additional
Procedure: Change the name of "Mary" and her "green dress" to fit actual names of children in class and what they are wearing.

Whenever Mary Puts Her Green Dress On


When ev- er Ma- ry puts her green dress on, green dress on,
green dress on When ev- er Ma- ry puts her green dress on we still
sing a lit- tle song, we will sing a song, It
need -n't be so long, for Ma- ry has her green dress on.

Contributed by Martha McBryde.

SONGS ABOUT SEASONS/WEATHER

Title: See individual selections

General Objective: To sing songs about the season and weather

Materials Needed: Tape recorder

Pictures showing the way our world looks during different seasons

Leaves - real and pictures - in the fall

Pictures of birds

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding responses.

Have children repeat words as verse, using any action and/or movement.

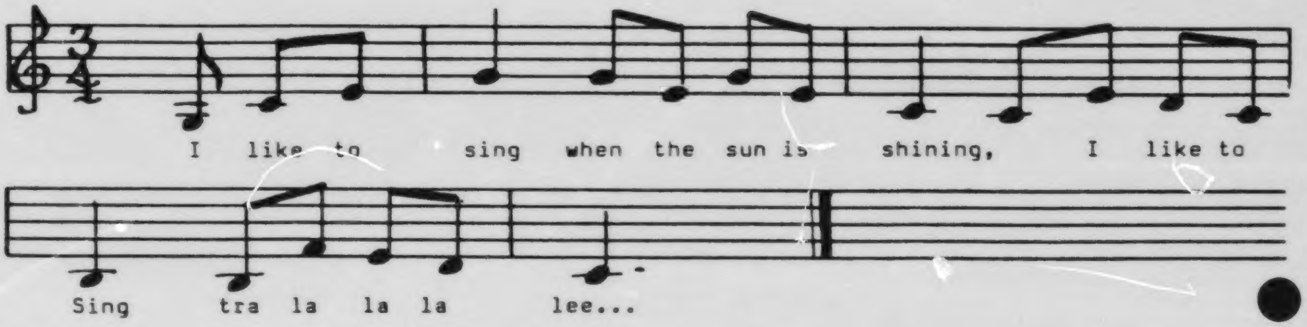
Have children sing song, using any action and/or movement and using the pictures and nature objects name in "Materials Needed".

Tape record and play back when song is familiar enough to children.

General Evaluation: Observe/listen to participation.

Listen to tape recording.

I Like To Sing

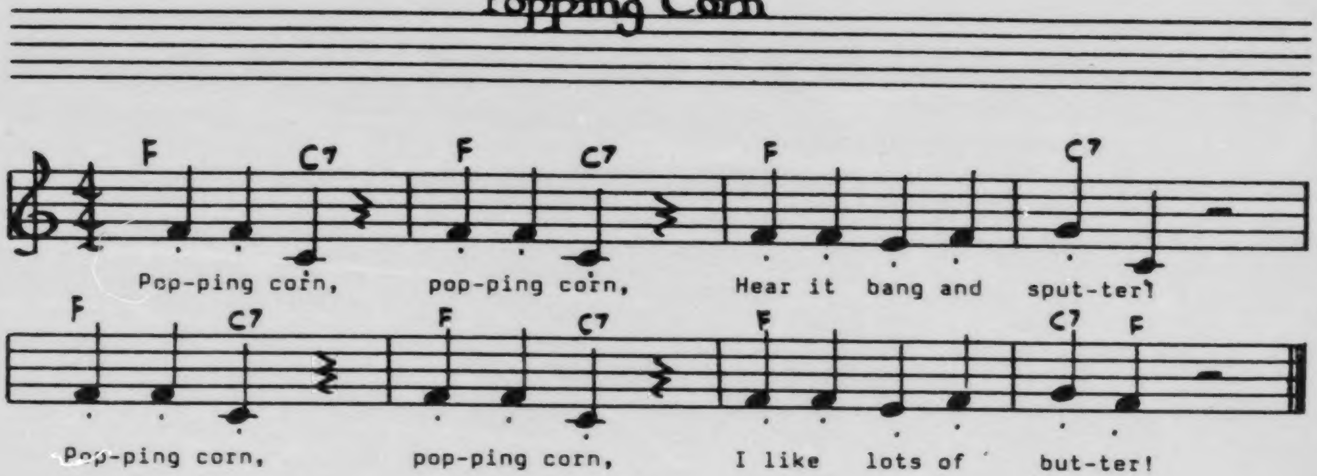

I like to sing when the sun is shining, I like to
Sing tra la la la lee...

Sing when the rain is failing, when the wind is blowing, when the snow is swirling . . . .

motions:
- -Hold arms above head forming a circle representing the sun.
- -Begin with hand above head and gently bring down moving fingers to represent rain.
- -Move arms back and forth in sweeping motion for the wind.
- -Begin with hands above head and gradually move downward hands in a circular motion.

Ole Miss Songsheet.
Contributed by Mary Jo Cliatt.

Popping Corn


F
C7
F
C7
F
C7
Pop-ping corn,
pop-ping corn,
Hear it bang and
sput-ter!
F
C7
F
C7
F
C7
F
Pop-ping corn,
pop-ping corn,
I like lots of
but-ter!

NOTE: Some kindergarten teachers make lots of popcorn in the fall! Sing this song when you pop corn!

MACUS Songsheet.
Contributed by Mary Jo Cliatt.

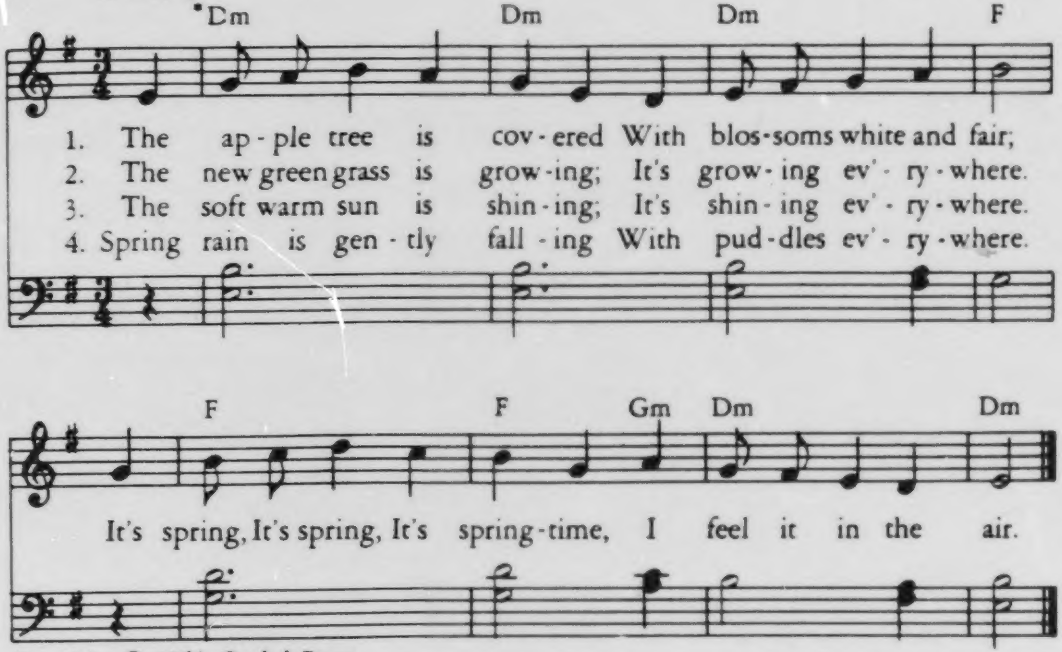
It's Spring

(To be sung like a ballad)

MAGGIE MAY BURROW

V. EARLE COPES

Leisurely


*Dm
Dm
Dm
F
1. The ap - ple tree is cov - ered With blos - soms white and fair;
2. The new green grass is grow - ing; It's grow - ing ev' - ry - where.
3. The soft warm sun is shin - ing; It's shin - ing ev' - ry - where.
4. Spring rain is gen - tly fall - ing With pud - dles ev' - ry - where.
F
F
Gm
Dm
Dm
It's spring, It's spring, It's spring - time, I feel it in the air.

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*Autoharp chords for D-minor.

Spring Nursery Songs, p. 7, 1966
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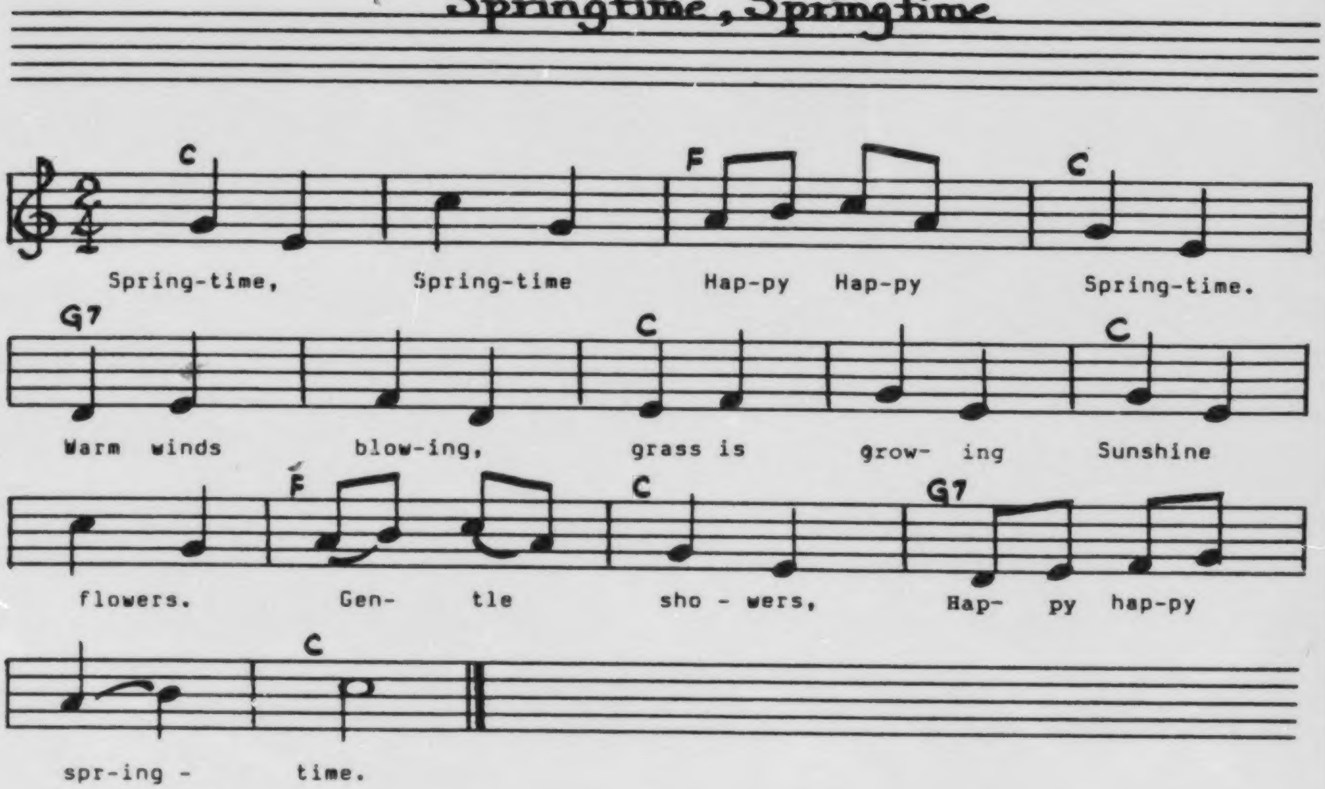
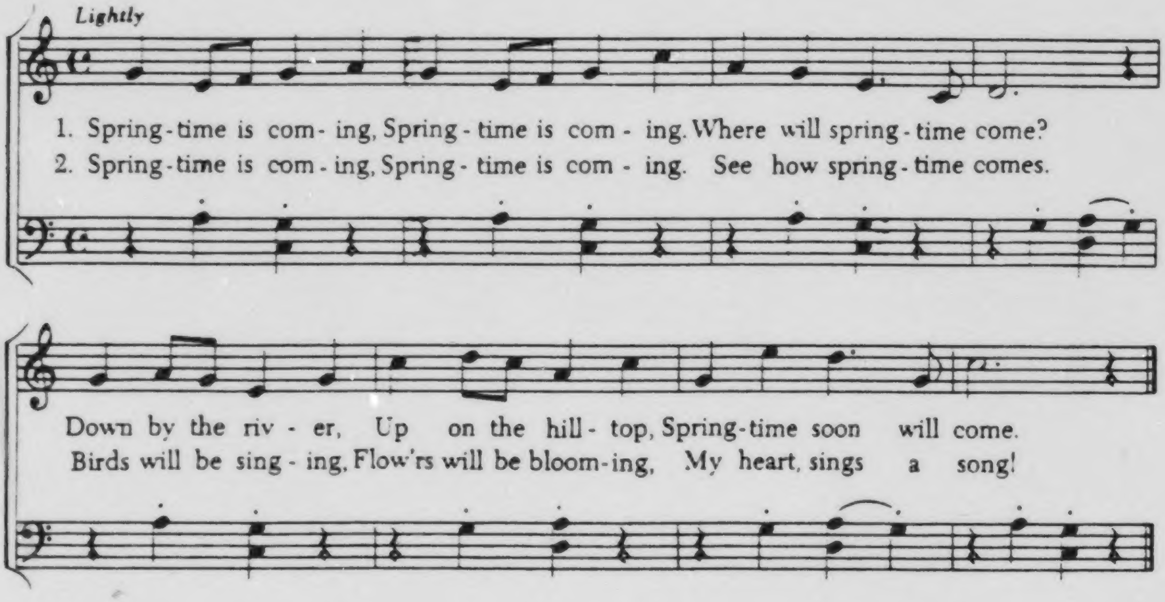
Springtime, Springtime


C
Spring-time,
Spring-time
F
Hap-py Hap-py
C
Spring-time.
G7
Warm winds
blow-ing,
C
grass is
grow- ing
C
Sunshine
flowers.
F
Gen- tle
C
sho - wers,
G7
Hap- py hap-py
spr-ing -
C
time.

Contributed by Martha McBryde.

Springtime Is Coming

Mary Jaye Japanese Folk Song
Arranged by James Rooker


Lightly
1. Spring-time is com- ing, Spring - time is com - ing. Where will spring - time come?
2. Spring-time is com - ing, Spring - time is com - ing. See how spring - time comes.
Down by the riv - er, Up on the hill - top, Spring-time soon will come.
Birds will be sing - ing, Flow'rs will be bloom-ing, My heart, sings a song!

Verse 1	Measure 1:	Swing both arms to shoulder level (palms of hand up) sideways to right.
	Measure 2:	Swing both arms to shoulder level sideways to left.
	Measures 3-4:	Spread arms at waist level.
	Measure 5:	Swing both arms down toward left foot.
	Measure 6:	Raise both arms overhead toward left.
	Measures 7-8:	Spread arms at shoulder level and go around in a little circle.
Verse 2	Measures 1-4:	Same as in verse 1
	Measure 5:	Pretend to pluck a song from the lips and wave it in the air.
	Measure 6:	Pretend to pick a flower with the right hand, then place it in the left hand.
	Measures 7-8:	Cross arms over chest and bow slightly from the waist.

Making Music Your Own, p. 132, 1971.
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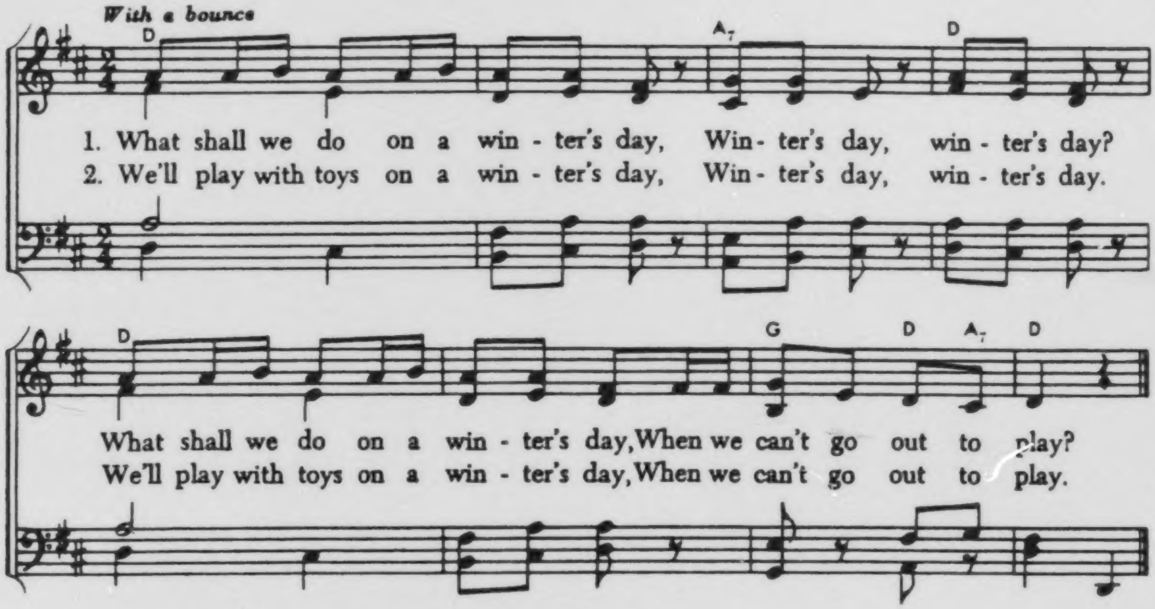
What Shall We Do?

Mary Jaye Game Song
Arranged by Alice Firgau


With a bounce
D
A7
D
1. What shall we do on a win - ter's day, Win- ter's day, win - ter's day?
2. We'll play with toys on a win - ter's day, Win- ter's day, win - ter's day.
D
G
D
A7
D
What shall we do on a win - ter's day, When we can't go out to play?
We'll play with toys on a win - ter's day, When we can't go out to play.

3. I'm a steam shovel and I dig, dig, dig ...
   I dig on a winter's day.
4. I'm a rocket ship and I zoom, zoom, zoom ...
   I zoom on a winter's day.
5. I'm a spinning top and I whirl, whirl, whirl ...
   I whirl on a winter's day.
6. I'm a ballerina and I dance, dance, dance ...
   I dance on a winter's day.
7. I'm a big robot and I walk, walk, walk ...
   I walk on a winter's day.

Making Music Your Own, p. 102, 1971.
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SEQUENCE SONGS

Title: See individual selections

General Objective: To sing songs which have several verses and a sequence which repeats at the end of each verse

Materials Needed: Tape recorder

Flash cards, pictures, flannel board figures, etc., of each sequence

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding responses.

Have children repeat words as verse, using any action and/or movement.

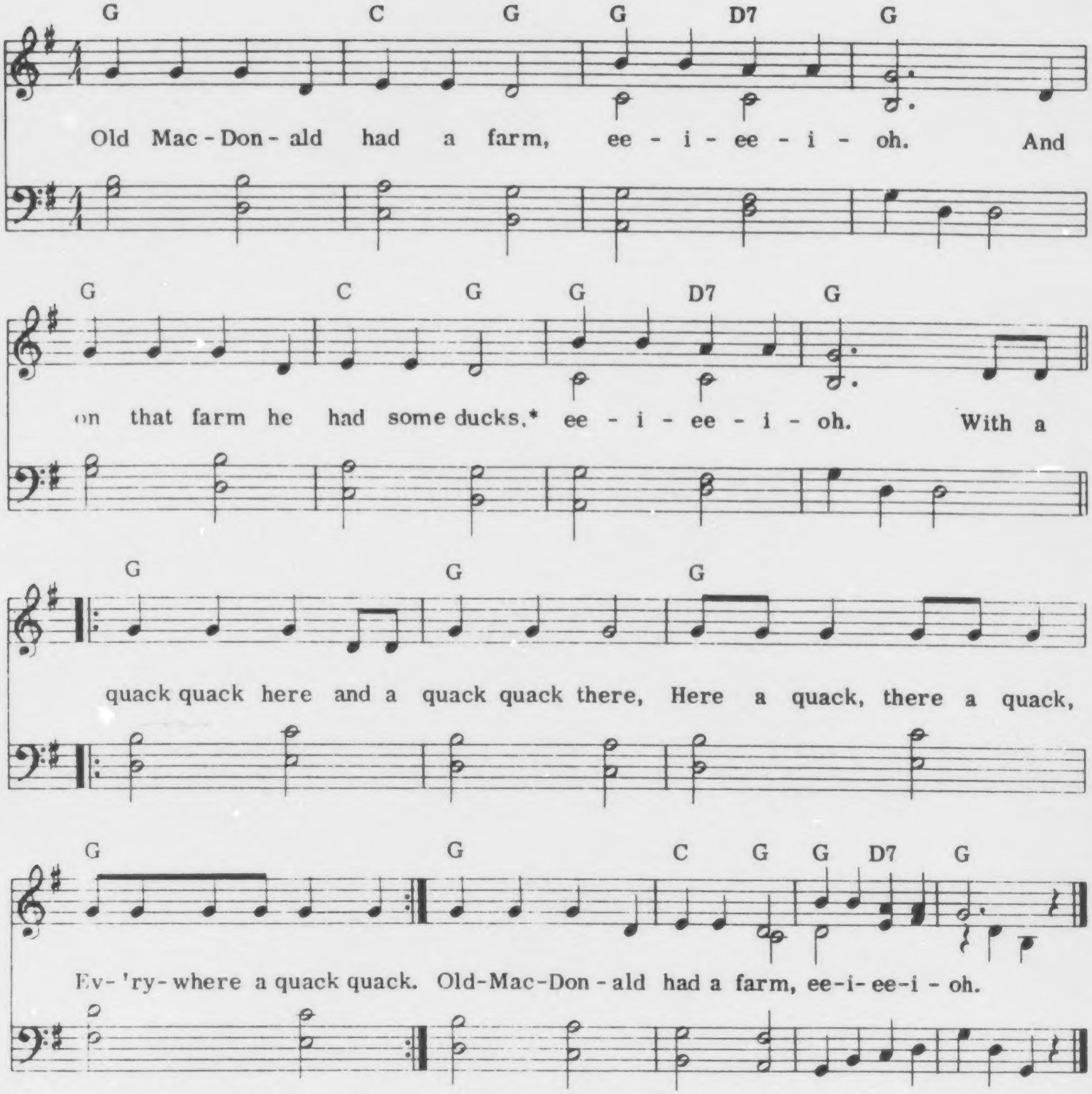
Have children sing song, using any action and/or movement, and using the flash cards, pictures, flannel board figures, etc., named in "Materials Needed".

Tape record and play back when song is familiar enough to children.

General Evaluation: Observe/listen to participation.

Observe whether children are able to repeat sequence endings in order after each verse.

Listen to tape recording.


G C G G D7 G
Old Mac-Don-ald had a farm, ee-i-ee-i-oh. And
G C G G D7 G
on that farm he had some ducks,* ee-i-ee-i-oh. With a
G G G
quack quack here and a quack quack there, Here a quack, there a quack,
G G C G G D7 G
Ev-'ry-where a quack quack. Old-Mac-Don-ald had a farm, ee-i-ee-i-oh.

Traditional. Arranged by VERNE NEWTON. Arrangement © Copyright 1975 Broadman Press. All rights reserved. International copyright secured.

**Substitute: turkeys (gobble), sheep (baa), pigs (oink), cows (moo).*

Music for Today's Children, p. 105.
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TRANSPORTATION SONGS

Title: See individual selections

General Objective: To sing songs about various kinds of transportation and related items (traffic lights, for instance)

Materials Needed: Tape recorder

Pictures (or replicas) of various modes of transportation

General Procedure: Sing song with no (or very light) accompaniment.

Repeat words as verse, demonstrating any action and/or movement.

Teach unfamiliar words by asking leading questions and guiding responses.

Have children repeat words as verse, using any action and/or movement.

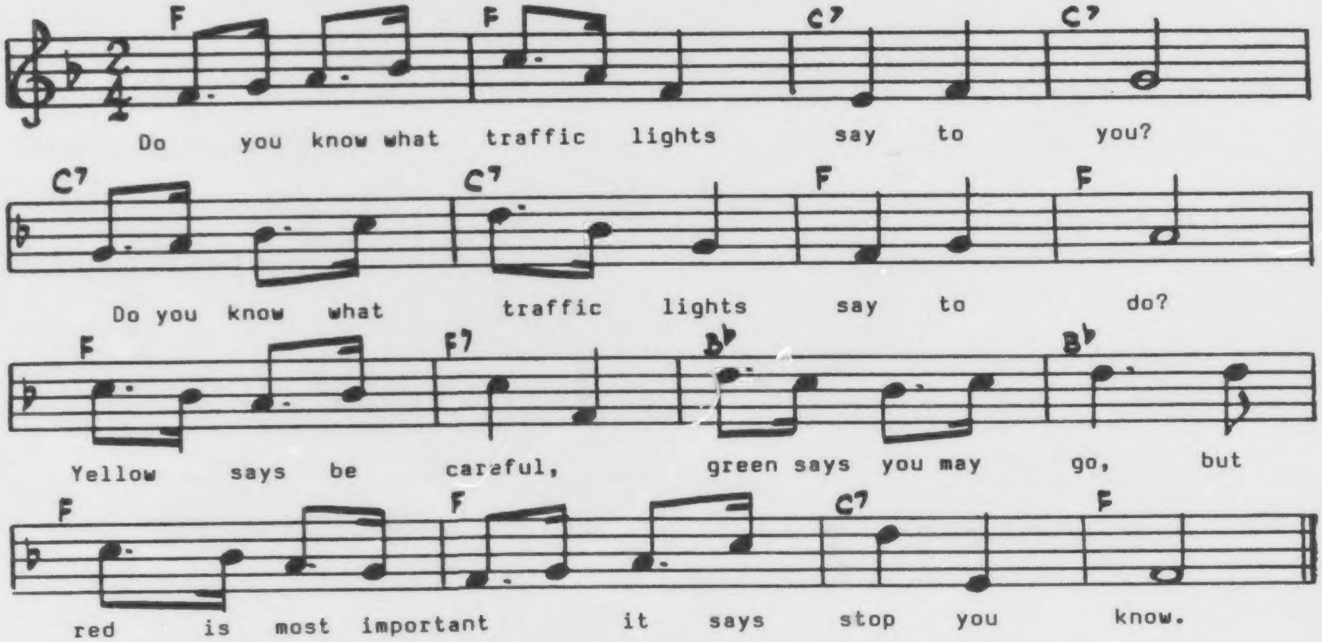
Have children sing song, using any action and/or movement, and using any pictures or replicas of various modes of transportation.

Tape record and play back when song is familiar enough to children.

General Evaluation: Observe/listen to participation.

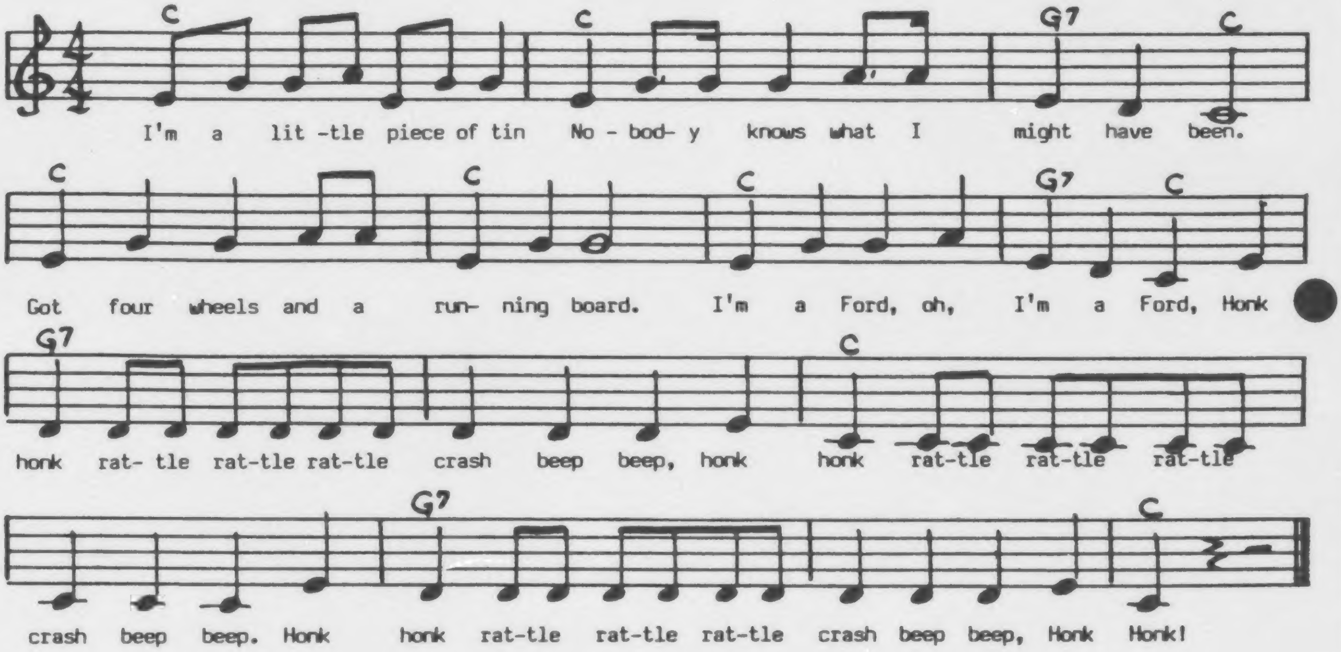
Listen to tape recording.

Traffic Lights


F F C7 C7
Do you know what traffic lights say to you?
C7 C7 F F
Do you know what traffic lights say to do?
F F7 B♭ B♭
Yellow says be careful, green says you may go, but
F F C7 F
red is most important it says stop you know.

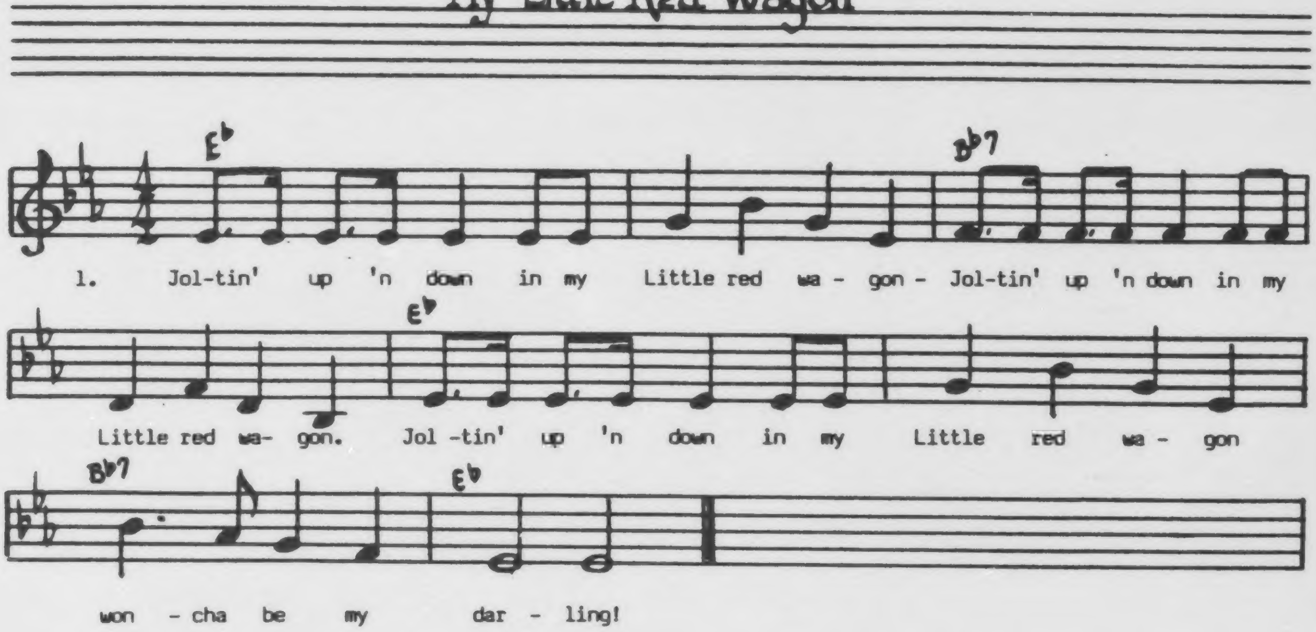
University of Mississippi Songsheet.
Contributed by Mary Jo Cliatt.

I'm A Little Piece of Tin


C
C
G7
C
I'm a lit -tle piece of tin No - bod- y knows what I might have been.
C
C
C
G7
C
Got four wheels and a run- ning board. I'm a Ford, oh, I'm a Ford, Honk
G7
C
honk rat- tle rat-tle rat-tle crash beep beep, honk honk rat-tle rat-tle rat-tle
G7
C
crash beep beep. Honk honk rat-tle rat-tle rat-tle crash beep beep, Honk Honk!

Contributed by Martha McBryde.

My Little Red Wagon

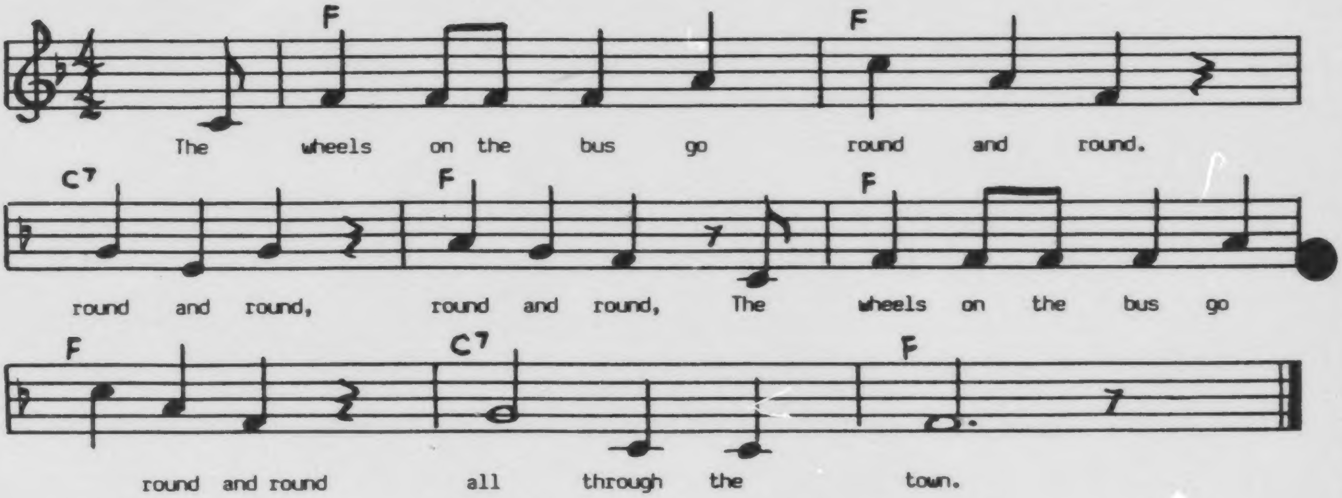

E♭
B♭7
1. Jol-tin' up 'n down in my Little red wa - gon - Jol-tin' up 'n down in my
E♭
Little red wa- gon. Jol -tin' up 'n down in my Little red wa - gon
B♭7
E♭
won - cha be my dar - ling!

2. Now what's wrong with my little red wagon?
Now " " " " " " "
Now " " " " " " "
Won-cha be my darling!

3. One wheel's off and the axle is draggin'
One " " " " " " "
One " " " " " " "
Won-cha be my darling!

Contributed by Martha McBryde.

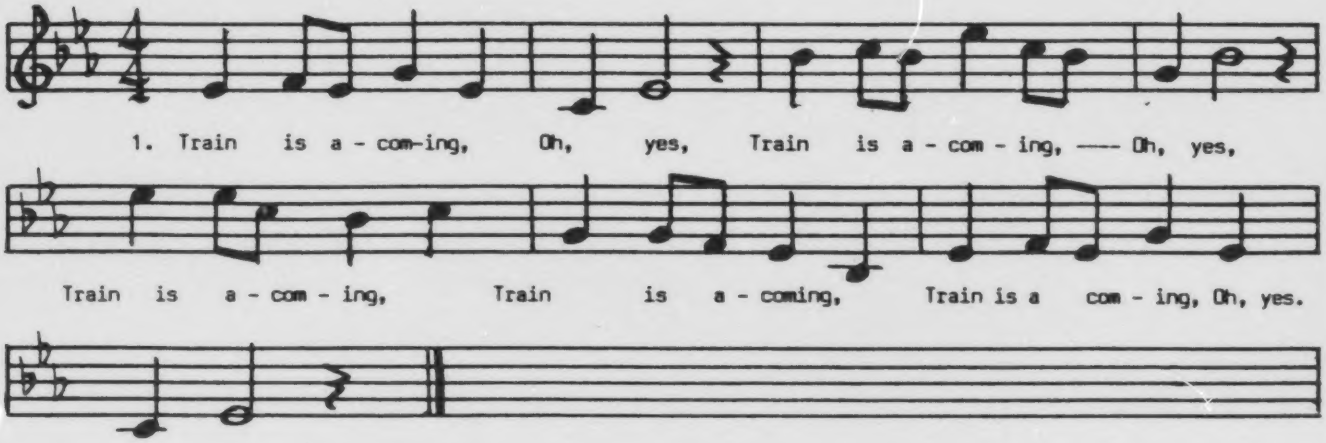
Wheels on the Bus


F
F
C7
F
F
F
C7
F
The wheels on the bus go round and round.
round and round, round and round, The wheels on the bus go
round and round all through the town.

2. The driver on the bus yells "Move on back"
3. The horn on the bus goes "Beep, beep, beep"
4. The babies on the bus go, "Wah, wah, wah"
5. The mothers on the bus go, Sh-h, sh-h, sh-h"
6. The money on the bus goes "Clink, clink, clink"
7. The wipers on the bus go "Swish, swish, swish"
8. The people on the bus go up and down,

University of Mississippi Song Sheet.
Contributed by Mary Jo Cliatt.

Train Is A-Coming


1. Train is a - com-ing, Oh, yes, Train is a - com - ing, ---- Oh, yes,
Train is a - com - ing, Train is a - coming, Train is a com - ing, Oh, yes.

2. Bet-ter get your tic-ket, Oh, yes,----
Bet-ter get your tic-ket,-----

3. Train is a-leaving, Oh, yes,----
Train is a-leaving,-----

MACUS Songsheet.
Contributed by Mary Jo Cliatt.

RHYTHMIC AND CREATIVE MOVEMENT

Rhythmic movement and use of rhythm instruments.

Name Rhythms

Objective: The child will be able to echo rhythms. To clap the rhythm of their own name and their friends' names

Materials: None

Procedure: Say child's name; she/he echoes. Clap child's name; she/he echoes. Group children whose names have the same rhythms and when you point to each group, they clap their names together. (This will take time. Clap names for several days before grouping.)

Ca thy Stew art   Bes sie Con nor   Glen da Brown

Lin da Smith   Dave Jones   Mike Smith

Evaluation: Observe children to see that they can hear their name rhythm and clap it.

Move to the Shape

Objective: The child will match symbols to movement.

Materials Needed: Cards with symbols on them - recorded music

Procedure: Show symbol cards to the children and discuss. Start with 2 or 3 and add more later. Hold up card and children do what the symbol says to the music.

Evaluation: Observe to see that children match movement to symbols.

Beef Pork Ham

Objective: The child will repeat selected verses and substitute words with clapping and snapping.

Materials Needed: None

Procedure:
Beef, pork, ham, (snap)
Veal, turkey, lamb (snap)
This is what the butcher sells (snap)
Thank you, man (snap)

1. Teacher says - Children repeat
2. Teacher claps on each syllable as she says it - clap & repeat
3. Teacher claps and snaps - clap and snap
4. Omit words just clap and snap
5. Omit words and clap - just snap

Evaluation: Observe to see if children can say verse and repeat rhythm pattern.

Now Let's Get the Rhythm

Objective: The child will be able to repeat words and rhythms.

Materials Needed: None

Procedure: Teacher says first line and move body part - children echo.

Now let's get the rhythm with the head - swing head (ding dong)

(echo)
Now let's get the rhythm with the hands (clap, clap)

(echo)
Now let's get the rhythm with the feet (stomp, stomp)

(echo)
Now let's get the rhythm with the hips (swing hips - say hot dog!)

(echo)
Not let's get the rhythm all over again
ding-dong, clap, clap, stomp, stomp, hot dog!

Evaluation: Observe to see that children echo movement and words.

Chant Nursery Rhymes

Objective: The child will be able to recite nursery rhymes and repeat to a rhythmic pattern.

Materials Needed: None

Procedure: Divide children into two groups.

Group I	Group II
Humpty Dumpty sat on a wall	Hum pe ty Dump
Humpty Dumpty had a great fall	Hum pe ty Dump
All the king's horses and all the king's men	
Couldn't put Humpty together again.	

Group 2 repeats chant while Group I chants entire nursery rhyme.

Jack & Jill went up the hill - Jack and Jill   Jack and Jill

Peas porridge hot, peas porridge cold - Peas in the pot
Peas in the pot

Variation 1: Clap instead of saying words.
Variation 2: Use instruments instead of saying words.

Evaluation: Observe to see that children know the nursery rhymes and chant them with rhythm.

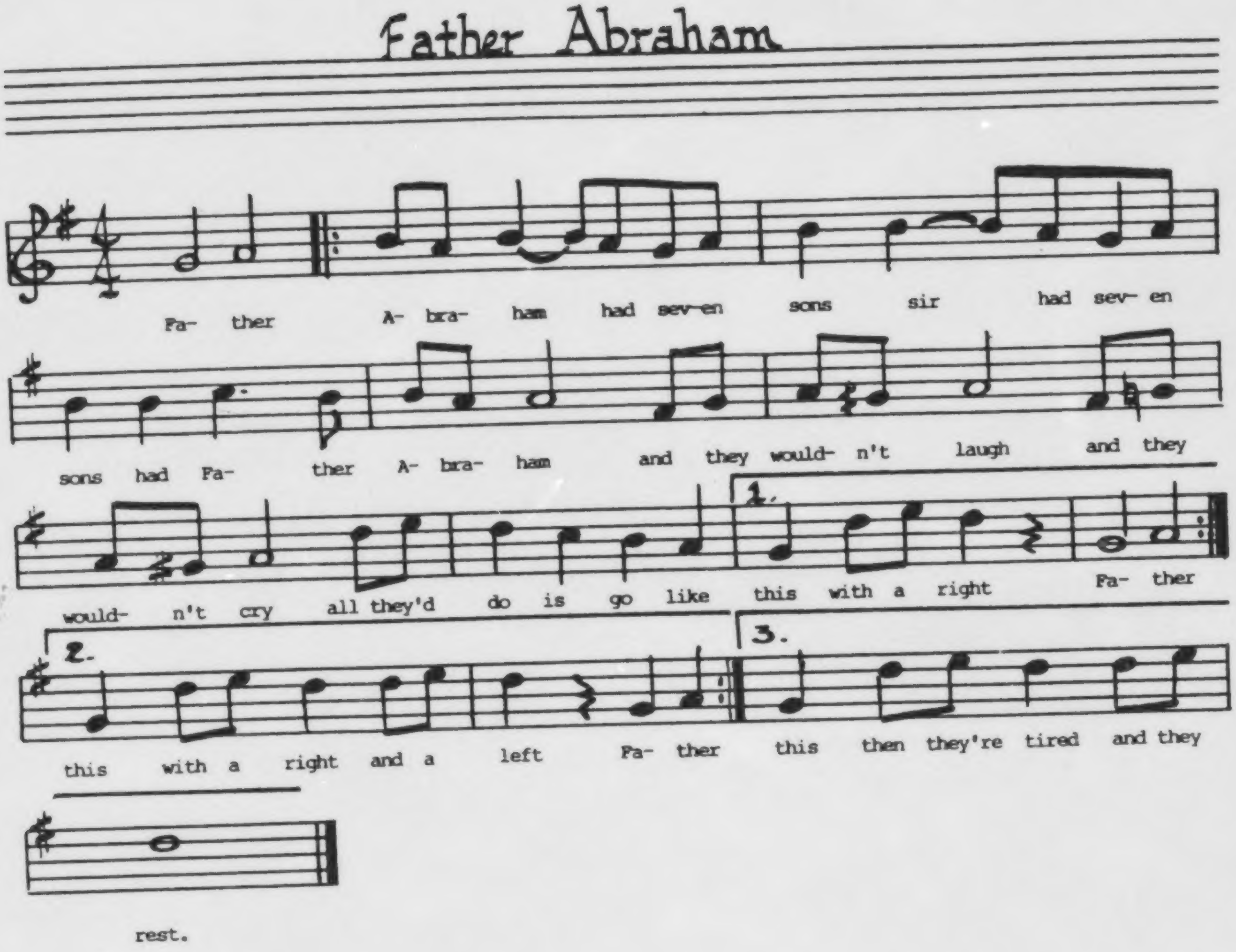
Father Abraham

Objective: The child will demonstrate left and right movements to a song.

Materials Needed: None

Procedure: Sing
Father Abraham had seven sons, sir
Had seven sons had Father Abraham
And they wouldn't laugh and they wouldn't cry
All they'd do is go like this
With a right (move right arm at shoulder height in and out)
Repeat song and say:
"With a right and a left"
Repeat moving right and left arm and say:
"With a right and a left and a right" (add right foot - in and out)
"With a right and a left and a right and a left" (add left foot)
Repeat song and say, "With a right and a left and a right and a left and a head."
The last time you sing the song you'll be moving both arms in and out, both feet marching and head going up and down!)

Father Abraham


Fa- ther A- bra- ham had sev-en sons sir had sev- en
sons had Fa- ther A- bra- ham and they would- n't laugh and they
would- n't cry all they'd do is go like this with a right Fa- ther
1.
2.
this with a right and a left Fa- ther this then they're tired and they
3.
rest.

Mary Jo Cliatt. Used with Permission

Evaluation: Observe to see that children know left and right and move in rhythm to the music.

(On the last verse you end with.....is go like this then they're tired and they rest.)

Oh, I Just Got Back

Objective: The child will echo and copy leader's movement.

Materials Needed: None

Procedure: Leader says each line and children repeat.
Oh, I just got back
From Old Algiers
And brought with me
A pair of shears. (moving fingers apart like shears)

Oh, I just got back
From Honolu
And brought with me a wooden shoe (tap foot - continue hand moving like shears)

Oh, I just got back
From the New York fair
And brought with me
A rocking chair. (rock body from waist up)

Oh, I just got back
From Ol' Japan
And brought with me
A waving fan (wave other hand like fan)
(You should be moving 4 things now.)

Oh, I just got back
From the Memphis zoo
And brought with me
A monkey like you!

Tune "How Dry I Am?

Evaluation: Observe children to see that they echo words and movements of the leader.

ABC Jive

Objective: The child will move to the alphabet "jive".

Materials Needed: None

Procedure: Say ABCs in a "cool" way. ABCDEFG HIJKLMNOP QRS TUV WX Y AND Z.
Say ABCs and clap.
Say ABCs and step in place
Do dance step to ABCs:

a. Move to right in 4 slides on A B C D E F G
b. Stand in place and step LM NOP
c. Upe 3 steps on QRS
d. Back 3 on TUV
e. WXY and Z

Step and turn you body in place a in circle, X is halfway point of circle. You can put this to "Sweet Georgia Brown."

Evaluation: Observe to see that children know the alphabet and can move in the proper sequence.

Jenny Crack Corn

Objective: The child will demonstrate knowledge of verse, movement. and left to right direction.

Materials Needed: None

Procedure: Sing: (Tune - "Jimmy Crack Corn")

Chorus: Jimmy crack corn and I don't care
Repeat
Repeat
Today's a holiday

1. Round and round and I don't care
Repeat
Repeat
Now let's all stand still.
2. Right hand up and I don't care
Repeat
Repeat
Now turn the other way
3. Left hand up and I don't care
Repeat
Repeat
My master's gone away
4. Both hands up and I don't care
Repeat
Repeat
Circle round again.
(Repeat chorus)

Evaluation: Observe to see that children know left and right. Observe to see that they learn verse and movement correctly.

The Grand Old Duke of York

Objective: The child will recite verse and make corresponding movement.

Materials Needed: None

Procedure: Say or sing. Tune "A Hunting We Will Go"
The Grand Old Duke of York
He had 10,000 men (hold up 10 fingers)

He march them up to the top of the hill (stand up)
And march them down again (squat)
And when they're up, they're up (stand up)
And when they're down, they're down (squat)
But when they're only halfway up (half stand)
They're neither up (stand) or down (squat).

Evaluation: Observe children to see that they stand and squat at the correct times.

Oliver Twist

Objective: The child will echo and move to verse.

Materials Needed: None

Procedure: Say the verse below. The children echo the words in parentheses and do the movement as they echo.

Oliver Twist (Twist) - touch head
Couldn't do this (this) - touch shoulders
Touch his knees (knees) - touch knees
Touch his toes (toes) - touch toes
Clap his hands (hands) - clap hands
Over he goes (goes) - throw hands over shoulders

Evaluation: Observe to see that children echo and do specific movements.

Movement Song

Objective: The child will demonstrate specific body movements.

Materials Needed: None

Procedure: Teach this song to the tune of "Do-Re-Mi."

Hand on hips
And turn around
Stop
And stand next to a friend.
Say good bye
Stretch
and bend and stretch again
Swing
And swing around the room.
Try
And find that friend again.
Catch
His hand and then say, "hi."
Now we can begin again.

Children choose a partner. Sing the song and carry out the action.

Evaluation: Observe to see that children sing song and move accordingly.

Source: "Early Years" May, 1974, p. 71.

Musical Hoops

Objective: The child will move to the beat of the music.

Materials Needed: Hula hoops and music

Procedure: Hop from hoop to hoop to the beat of the music. Stop when music stops.

Evaluation: Observe to see that the children hop to the beat of the music.

Move or Conduct

Objective: The child will differentiate between high and low melodies.

Materials Needed: Piano or recorded piano music

Procedure: Say:
"If you hear a low melody on the piano, march to it (parade like). If you hear a high melody, stand in one place and move your hands in time to the music. If there is no sound freeze."

Evaluation: Observe to see if children can identify high and low tones by the way they move.

Drum Walk

Objective: The child will walk to the beat of a drum.

Materials Needed: A drum

Procedure: The leader plays a drum for everyone to walk. When he taps the side of the drum everyone stands still and taps his own shoulders.

Evaluation: Observe to see that children can walk to the beat of the drum.

Bend and Stretch

Objective: The child will recite verse and indicate correct accompanying movement.

Materials Needed: None

Procedure: Say
"Bend and stretch for the star
There goes Jupiter, there goes Mars (point)
Bend and stretch up to the sky
Stand on tippy toes, oh, so high."

Evaluation: Observe to see that the children perform the correct accompanying movement.

Move With The Instrument

Objective: The child will move to the sound of an instrument.

Materials Needed: Any instrument - a drum, a recorder, an autoharp, a guitar, a ukelele, etc.

Procedure: Say:
"Move to the sound of an instrument as it goes louder, softer, higher, lower."

Evaluation: Observe children to see that they respond to the music of the instrument.

For following Activities:

Objectives: The child will follow directions.
The child will coordinate movement with spoken verse.

Evaluation: Observe to see that children can coordinate movement with spoken verse.

Materials Needed: None

Procedure:
Two little hands go clap, clap, clap
Two little feet go tap, tap, tap
Two little hands go thump, thump, thump
Two little feet go jump, jump, jump,
One little body turns around
And little child quietly sits down.

Clap Your Hands

Materials Needed: None

Procedure:
Clap your hand, clap your hands
Clap them just like me
Touch your shoulders, touch your
shoulders, touch them just like me
Tap your knees, tap your knees
Tap them just like me.
Shake your head, shake your head
Shake it just like me
Clap your hands, clap your hands
Now let them quiet be.

Hands

Objective: The child will coordinate body parts to verse to identify body parts through movement.

Materials Needed: None

Procedure: Say:
"Hands on hips, hands on your knees
Put them behind you, if you please
Touch your shoulders, touch your toes
Touch your knees, touch your nose
Raise your hands, way up so high
And let your fingers swiftly fly
Then hold it out in front of you
While you clap them 1 and 2."

Evaluation: Observe to see that children touch correct body parts and coordinate movement with verse.

Teddy Bear

Objective: The child will:
identify rhyming words;
coordinate specific movement and verse.

Materials Needed: None

Procedure:
Teddy Bear, Teddy Bear, turn around
Teddy Bear, Teddy Bear, touch the ground
Teddy Bear, Teddy Bear, show your shoe
Teddy Bear, Teddy Bear, that will do.
Teddy Bear, Teddy Bear, go upstairs.
Teddy Bear, Teddy Bear, say your prayers
Teddy Bear, Teddy Bear, turn off the light.
Teddy Bear, Teddy Bear, say good night

Evaluation: Verbally identify rhyming words. Observe memorization of verse and movement.

Chester

Objective: The child will recite verse and make correct accompanying movement.

Materials Needed: None

Procedure: Teach verse. Touch parts of the body when mentioned (underlined).

Oh, Chester have you heard about Hairy?
Just got back from the army.
I hear he knows how to touch his toes.
Hip Hip hooray for the army.

Evaluation: Observe to see that children learn the verse and touch correct body parts.

Razzle Dazzle

Objective: The child will:
walk to the rhythm of a chant;
demonstrate specific steps to a chant.

Materials Needed: None

Procedure: Teach the chant. Clap to the beat of the chant. Walk to the beat of the chant. Add steps. Do in a line.

My name is Cathy and I'm Number One.
(Walk forward 4 steps on underlined words.)
My razzle dazzle has just begun.
(Walk backward 4 steps on underlined words.)
If you see me coming
(Walk forward 2 steps on underlined words.)
Better step aside
(slide right foot to the right on step, bring left foot beside it on aside)
Cause Cathy Stewart
(slide left foot back to the left on Cathy bring right foot beside it on Stewart)
takes no jive
(three quick steps back-on each word.)

(Assign a different number to each child. Each child changes according to his number.)
Number Two: Is just for you
Number Three: Is just for me
Number Four: Is at the door
Number Five: is coming alive
Number Six: is just for kicks
Number Seven: is up in heaven
Number Eight: is never late
Number Nine: is right on time
Number Ten: is at the end

Evaluation: Observe if children can walk to the beat of the chant.
Observe if children can remember sequence of steps.

When I Was One

Objective: The child will say verse and do specific movements; recognize rhyming words.

Materials Needed: None

Procedure: When I was one (hold up finger)
I ate a bun
Going over the sea

I jumped (jump) a board a sailing ship
And the sailor (salute) said to me
Going over (hands over)
Going under (hands under)
Stand at attention like a soldier (do)
With a 1, 2, 3, (1 finger, 2 fingers, 3 fingers)

2 buckle my shoe
3 feel on my knee
4 knocked at the door
5 took a dive
6 picked up sticks
7 went to heaven
8 learned to skate
9 climbed a vine
10 caught a hen

Evaluation: Leave out the rhyming word and have children supply it. Observe to see that children do specific movements to the verse.

Haunted House "Movin"

Objective: The child will move like ghosts, goblins, and monsters.

Materials Needed: Record or tape

Procedure: Children sit in a large circle. Choose children to be goblins, ghosts, and monster. The first part of the song - goblins tiptoe to the beat. The second part of the song - ghost "float" to the beat. The third part of the song - monsters stomp to the beat of the song.

Evaluation: Observe to see that children move to the beat of the music.

Creative Movement
What Is Your Language?

Objective: The child will move like animals.

Materials Needed: None

Procedure: Have children sit in a circle and guess what a chosen child is pretending to be. When someone wants to guess, they say:
"What is your language?
Don't make me guess
If you're a ______________ (tiger)
You say ______________ (grr)"

Evaluation: Observe children's ability to become like animals and move in different ways.

Everybody Do This

Objective: The child will follow a leader;
respond creatively and spontaneously through movement.

Materials Needed: None

Procedure: Have children stand in a circle and the leader in the middle.
Everyone says:
"Everybody do this, do this, do this
Everybody do this, just like me."

Children take turns being the leader.

Evaluation: Observe children responding in a unique way and the children's ability to follow the leader.

Creative Movement Situations

Objective: The child will interpret a given situation by responding in a unique way.

Materials Needed: None

Procedure: Read the following situations and let children respond in their own way.

1. How heavy can you make yourself: Think of something very heavy; the heaviest thing in the world. Can you make yourself that heavy?
2. How do you think you would move if you were in a tiny box?
3. Now, how could you move if you were in a great big box?
4. Move like you are the biggest monster I ever saw.
5. Move like you are the tiniest little bug crawling on the gound.

Evaluation: Observe each child to see that he is moving differently than others.

Copy Cat

Objective: The child will copy the movement of someone.

Materials Needed: None

Procedure: Put children in pairs and have them facing one another. One child moves and the other child copies. Change leaders.

Evaluation: Observe children. Be sure they are copying each other.

The Rag Doll

Objective: The child will respond to a movement story.

Materials Needed: None

Procedure: Read story below and let children respond through movement.

The Rag Doll

The poor rag doll lay on the floor. Of all things in the world the rag doll wanted to do, he wanted most of all to dance.
So...He lifted one raggedy leg, it fell down.
He lifted the other raggedy leg, it fell down.
He lifted his raggedy arms, they fell down.
He lifted his raggedy head, his raggedy neck, his raggedy back, they fell down.
Still, the rag doll wanted to dance
So...giving one tremendous try, he
lifted his raggedy head, his raggedy neck, his raggedy back
and pulled himself to his raggedy, wobbly legs
Then... flip, flop...swing and hop
flip, flop...swing and hop
flip, flop...swing and hop
flip, flop...and
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Evaluation: Observe to see that children respond to the story through movement.

Growing

Objective: The child will imitate the growth from a seed to a plant.

Materials Needed: None

Procedure: Say:
You are a seed in the gound. Someone is watering you, The sun is shining and you are beginning to grow. The sun has been out for several days and you have received no water. Now someone waters you. You continue to grow in the sunshine. You are a flower about to bloom. You recieve more water and sunshine. You begin to bloom. A little boy comes along to take you to his teacher.

Evaluation: Observe to see that children respond to given instructions through movement.

Number Movement

Objective: The child will move his/her body to form numbers.

Materials Needed: None

Procedure: Have the class sit in a large circle. Call on one child at a time to form the numbers 1-10 with instructions to use either his nose, arm, or entire body. You might have three different children form a 3 - each using a different instruction.

Evaluation: Observe children to see if they can create numbers on their own. If not, observe to see that they can follow directions.

Movement Motivated by Visual Objects

Objective: The child will move creatively.

Materials Needed: Light projector

Procedure:

1. By using a light projector, let the children perform a shadow dance finding different ways to make their shadows move.

   Create a moving pattern on the wall with a flashlight. When the light goes out, have the children copy the moving pattern they saw on the wall.

Evaluation: Observe to see that children move creatively. Observe to see that children copy light patterns correctly.

Walking and Twisting

Objective: The child will demonstrate the difference between fast and slow;
to move in accordance with specific directions.

Materials Needed: None

Procedure: Ask:

1. "Can you walk fast, even faster?"
2. "How slowly can you walk?"
3. "What other ways are there to walk?"
4. "Can you swing your shoulders when you walk?"

Evaluation: Observe children to see if they respond with the given directions as a guideline. Observe to see that children know the difference between fast and slow.

Parts of the Body

Objective: The child will use different parts of the body in movement.

Materials Needed: None

Procedure: Say:

1. "Move the smallest part of your body. Can you move 2 small parts?"
2. "Move the biggest part of your body? Can you move 2 big parts?"
3. "Can you move a part of your body from your neck, up and another from your hips down?"

Evaluation: Observe to see that the children move different parts of the body when directed.

Movement With Imaginary Objects

Objective: The child will move in a unique way with imaginary objects.

Materials Needed: None

Procedure: Say:

1. "Imagine, you are full of jumping beans, from the tip of your toes to the top of your head, and even to the ends of your fingers. Let all the beans jump at once."
2. "Pull an imaginary rope tied to an imaginary balloon that is very far away."
3. "Soft fluffy clouds are falling. Punch them into the sky."

Evaluation: Observe to see that children can move in a unique way using imaginary objects.

Becoming Something Different

Objective: The child will use his/her body to take on properties of objects.

Materials Needed: None

Procedure: Say:

1. "What happens when you pull a rubber band? (Demonstrate with a rubber band) Turn into rubber bands that stretch, that snap."
2. "You are a sweater. Can you show me what happens to you when you get washed in hot water and shrink?"
3. "Turn into a snowman being built. Now the sun is shining. What happens to you?"
4. "Can you all be toys under the Christmas tree? When the signal is given, all the toys come alive."

5. "You are a bubble...float through the air...up in the sky... turn over and over...you are falling down... hold on...you've popped!"

Evaluation: Observe the movement of the children. Have children verbally tell you what "shrinking" and "melting" means.

Imitate Pictures of People

Objective: The child will move creatively in response to pictures.

Materials Needed: Pictures of people in different positions

Procedure: Get pictures of people in different positions and put on cards similar to flash cards. Have the children look at the picture and mimic the position pictured. From here you can move to abstract pictures such as sketches of people in different positions and still to symbols of different positions.

Evaluation: Observe children to see that they match their positions to the positions on the cards.

Exploring Body as Rhythm Instrument

Objective: The child will explore his/her body as a rhythm instrument.

Materials Needed: Piano or record

Procedure: Have children sit on the floor. Ask: "Who can make a sound using his or her hands?" (Possibilities: clapping, slapping, snapping, clapping, with cupped hands, etc.) "If you stand up, what new sounds can you make?" (Possibilities: stamp, shuffle, tap toes, slide feet, heel-toe) "What are some of the sounds you can make with your mouth?" (Possibilities: tongue clacking, teeth clicking, lip smacking, hissing, and sighing) Play different kinds of music and let them respond in any way they wish.

Evaluation: Observe to see that children respond creatively to given suggestions.

Who Feels Happy?

Objective: The child will creatively respond to a song.

Materials Needed: None

Procedure: Say:
"Who feels happy?
Who feels gay?
All who do
Do your hands this way."
(Make motions)

2. your feet
3. arm
4. head
5. tongue
6. eyes
7. mouth

Let children lead one at a time.

Evaluation: Observe to see that children respond creatively.

One Elephant

Materials Needed: None

Objectives: The child will:
move like an elephant
count to five
distinguish between realism and fantasy.

Procedure: Sing or say,
"One elephant went out to play
out on a spider's web one day
(choose a child)
He had such enormous fun
That he called on another elephant to come,"
(child chooses someone).

Keep going until you have five children moving like elephants.

Evaluation: Observe children to see that they move in a way resembling an elephant. Note that they can count to five. Let children discuss whether this is real or fantasy.

References

Calhoun, Gaye, Public Music Teacher for Grades 1-3, Oxford Municipal School District.

Stecher, Miriam B., Hugh McElheny, Marion Greenwood, Joy and Learning Through Music and Movement Improvisations, Ohio, Macmillan Publishing Company, Inc., 1972.

LISTENING

Listening activities involving non-musical experiences

Listen for the Sound

Objective:	To indicate an awareness of the presence or absence of sound by raising and lowering the hand.
Materials:	A bell
Procedure:	Ring a bell. Have the children raise their hands every time they hear the bell ring and lower their hands when the bell stops ringing. Have the children play this game with their eyes open and then with their eyes closed.
Evaluation:	Observe to see if the children raise and lower their hands at the appropriate time. Observe to see if hands stay up as long as the bell rings.
Source:	Music: A Way of Life for the Young Child p. 38

Find the Kittens

Objective:	To locate the source of a sound by moving in the direction of that sound.
Materials:	None
Procedure:	One child can pretend to be the mother cat sleeping with eyes shut. Her three kittens (three other children) hide. As the mother cat awakens and calls to her kittens, they each "meow" from their hiding places. The mother cat must find her kittens by following the sound of their voices.
Evaluation:	Observe to see if the "mother cat" can find the source of the sound by locating the "kittens".
Source:	Music: A Way of Life for the Young Child p. 38

Help Me Find the Missing Toy

Objective:	To discriminate between loud and soft sounds. To find an object by interpreting loud and soft sounds.
Materials:	A small toy

Procedure: Send a child out of the room. Hide a toy somewhere in the room making sure that each child in the room sees where you have hidden the toy. Ask the children to help the child outside of the room to find the toy by clapping. They must clap softer the farther away the child moves from the toy and clap louder the closer the child moves toward the hidden toy. The child should be able to find the toy by the volume of the clapping.

Evaluation: Observe to see if the child can discriminate between the loud and soft sounds and if he can interpret their meaning by locating the toy.

Jack-in-the-Box

Objective: To differentiate between low pitches and high ones by jumping up from inside a box when the high note is played.

Materials: Large box, piano or xylophone.

Procedure: Children take turns being the jack-in-the-box. A child squats down inside the box. The teacher plays several low notes on the piano. Then the teacher plays a high note. At the sound of the high note, the child jumps up from inside the box.

Evaluation: Observe to see if the child jumps up when high note is played.

Source: Instructor, (Aug., Sept., 1975), pg. 123, 124.

Variation: The children sitting in the circle may shut their eyes and raise their hand when they think its time for "Jack" to pop up from the box.

Tape Recording Interesting Sounds

Objective: To identify sounds recorded on the tape recorder.

Materials: Cassette tape recorder and tape

Procedure: Help a small group of children record interesting sounds within the classroom. You might wish to take a group for a "listening walk" outside to record sounds. Let the group play the sounds they have recorded to see if their friends can identify the sounds. Encourage the children to record both natural sounds and man-made sounds.

Evaluation: Observe how well the children identify the sounds played on the tape recorder.

Title: Sounds that Tell

Objective: To differentiate between various moving sounds made by children by identifying these sounds verbally and by imitating these sounds in body movement.

Materials: None

Procedure: The children close their eyes. Have one child jump several times. As the class listens to the sound made, each child tries to guess how the child is moving. The teacher selects one child to imitate that movement as nearly as possible. Continue with children skipping, walking, sliding, and hopping.

Evaluation: Observe to see if children can listen and tell how a child is moving. Observe to see if children can describe the way a child sounds when moving by imitating the sound in movement.

Source: Early Years (Nov., 1973), p. 72.

Mimic Sounds

Objective: To discriminate between different sounds by mimicking.

Materials: None

Procedure: The teacher takes the children on a field trip (indoors or out of doors) and calls their attention to nonmusical sounds such as popcorn popping, sirens, birds singing, train whistle, typewriters. Encourage each child to imitate these sounds. Let him suggest other sounds in his surroundings to imitate.

Evaluation: Observe how accurately each child matches the nonmusical sound with his/her voice.

Listen and Play

Objective: To discriminate between the sounds of different rhythm instruments by playing the instrument heard.

Materials: A variety of rhythm instruments displayed on the table.

Procedure: Start with three instruments. Pick up each instrument one at a time and play the instrument as the children listen and watch. Be sure to tell the name of the instrument as you play it. Then have the children close their eyes. Choose one of the instruments and play it. Have the children raise their hands if they can identify which instrument that was played. Point to one child to come up to the table and play the same instrument that they heard you play. The children should be able to go through the process of listening to the instrument being played and coming to the table to pick the correct instrument and playing it without talking. As they improve in identifying the instruments, increase the number of instruments to choose from.

Evaluation: The children will identify the instrument being played by playing the same instrument.

Sound Effects

Objective: To demonstrate the ability to listen carefully and discriminately by imitating the sounds of things mentioned in a story as the story is read aloud.

Materials: None

Procedure: The teacher reads a story related to different animals. Everytime a different animal is mentioned in the story, the children respond by making the sound of that animal.

Variation: Teachers may also choose stories and poems about machines and various other sounds for children to interpret through sounds made with their voices or different parts of their bodies or sounds made with various rhythm instruments.

Evaluation: Observe to see if each child made appropriate sounds to accompany the story.

Identifying Rhyming Words

Objective: To identify rhyming words by clapping each time they hear a rhyming word or in place of the rhyming word.

Materials: None

Procedure: Encourage the children to change familiar nursery rhymes and poems clapping each time they hear a rhyming word and then clapping in place of the rhyming word.

Evaluation: Observe children's ability to clap at the same time they say the rhyming word or in place of the rhyming word.

Follow Directions

Objective: To interpret signals given by an instrument by responding correctly with body movements

Materials: Three different rhythm instruments, a screen or small partition to hide the instruments when they are being played.

Procedure: Tell the children that you are going to give directions in a different way. Every time they hear the drum play, they must slap their hands against their legs. Every time they hear the tamborine, they should shake their fingers in the air. When they hear the rhythm sticks, they must do nothing. Play the instruments while they watch you and let them respond as you play. Play each instrument one at a time and see if they can give the appropriate response as they hear each instrument.

Evaluation: Observe to see if each child responds in the correct way as he/she hears each instrument.

LISTENING ACTIVITIES INVOLVING MUSICAL EXPERIENCES

Arm Dance

Objective:
1. To interpret moods in music by coloring using the entire arm on butcher paper
2. To designate changes in music (changes in phrases or changes in form) by changing crayons when the music changes

Materials: Butcher paper, crayons, recorded music

Procedure: Place large sheets of butcher paper and crayons on the floor. Play music. Tell the children to do an "arm dance" by making big movements with crayons on the paper. Tell them to make the crayons show how the music sounds. Encourage them to make big movements with their arms and to use the entire arm, not just the hand. Have each child change crayons each time the music changes.

Evaluation:
1. Observe children's crayon drawings to see how closely they follow the mood of the music.
2. Watch children's arm movements to see if each child uses the entire arm in drawing.
3. Observe each child to see if he/she shows an awareness in the change of music by changing crayons, each time the music changes.

Source: *Creative Music for the Developing Child* p. 53-54.

Describing Music

Objective: To describe the sounds of music using many different adjectives.

Materials: Recorded instrumental music, chart paper, marker

Procedure: Play a record of instrumental music. It should be very short. Ask your students to listen carefully to the music and to think of ways to describe it. After the music has been played, let them brainstorm sharing their ideas. Make a listening chart of all of the descriptive adjectives they suggest. Encourage flexible thinking. Help them think of unusual categories. If the flow of ideas is slow it might be appropriate to play the music again to stimulate new ideas.

Evaluation: Observe the listing chart to see how many different descriptive adjectives the children used to describe the music.

Source: Metal Gymnastics p. 195.

Sharing Favorite Music

Objective: To select their favorite music with classmates; to tell why they like the music; to verbally share ideas about the sounds of the music.

Materials: Recorded music and record player

Procedure: Let children share their favorite songs or records with one another. You might ask one or two children to bring their favorite records each day. As each child plays his music before the class, ask him to tell the group what about the music he/she likes. As the students listen to the music, ask them to tell how the music sounds to them or to descirbe a picture that they "see" as they listen to the music. You might encourage them to tell the instruments they hear. Vary the questions you ask about the music.

Evaluation: The children will show their ability to make choices by bringing in a favorite record. Observe the children's discussions to see how well they tell why they like the muisc and how well their descriptions of the music fit the actual music.

Source: Mental Gymnastics p. 195.

Visiting Musicians

Objective: To discuss characteristics of various musical instruments.

Materials: Performers and their instruments

Procedure: Invite different musicians to visit the classroom and to play their musical instruments. These musicians do not have to be well trained to be invited. Perhaps you have parents who used to play an instrument in the high school band, or maybe you know high school students who will come and demonstrate how their instrument sounds. If possible allow the children to have some physical contact with the instrument--either by touching it or by making a sound with it (under the musician's supervision). Encourage the children to ask questions stemming from their experience. Help them discuss different qualities they have discovered about the instrument.

Evaluation: Observe the questions that your children ask the musician. Observe their discussion related to the characteristics of the instrument.

Name the Instrument

Objective: To identify the instruments being played in a musical selection

Materials: Recorded music featuring specific instruments (See bibliography for suggestions.)

Procedure: After children have had many opportunities to see and hear different instruments, bring in records featuring particular instruments. Have the children listen and guess which instrument is being played.

Evaluation: Listen to hear which children accurately identify the instrument being played in music.

Finding Similarities and Contrasts

Objective: To identify likenesses and differences in tempo, dynamics, and pitch through discussions and by nonverbal body interpretations.

Materials: Musical records or a piano

Procedure: Play short musical selections and ask the children to discuss the differences in the sound of the music. Bring out vocabulary words such as "high", "low", "fast", "slow", "loud", "soft". Encourage them to use these words to describe the sound they hear. To discriminate between loud and soft sounds, you might have the children stand when the music gets loud and sit when the music is soft. To show that they understand the difference between high and low pitches, have them point upward when the notes are high and down when the notes are low. To indicate a difference in tempos, the children might wiggle their fingers rapidly when the music is moving fast and swing their hands slowly when the music has a slow tempo.

Variation: Encourage the children to listen and tell you if the music consists of only a melody or a melody plus a chord accompaniment. Have them listen and tell whether one or more instruments are being played.

Evaluation: Observe to see if the children identify the sounds correctly by using the appropriate vocabulary term to match the music. Observe to see if children move their bodies correctly to interpret the sounds.
Example: Do they point upward for high pitches and down for low pitches.

Matching Tones

Objective: To match tones played on bells or piano with their voices.

Materials: Tuned bells or piano

Procedure: Play different tones on the bells or the piano. Have the children try to match each tone that is played with their voices. Make a game out of this activity. Stay within the range of middle "C" and "A" above middle "C".

Evaluation: Listen to hear if the children match the tones you play.

Source: Music: A Way of Life for the Young Child. p. 37.

Listening with a Flashlight

Objective: To identify the direction of the melody and high and low pitches by flashing a light on the wall.

Materials: Several flashlights

Procedure: Darken the room and play a record for your students. Demonstrate what you wish your students to do. Flash a light on the wall. Make the flashlight give a visual picture of the way the music moves. As the music moves up the light should move up on the wall. High pitches or low pitches should be indicated by flashing the light high or low on the wall. After the children understand what they are to do, let them try it using several flashlights. If you wish to lead them, cover your flashlight with red cellophane so the children can follow the lead flashlight. Be sure to choose simple melodies that have a definite upward and downward flow or music that distinctly hops from high to low pitches.

Evaluation: Children will demonstrate their ability to discriminate between high and low pitches and the direction of the melody by the way they cast the light on the wall.

Source: Mental Gymnastics p. 196. (a good rainy day activity)

Mirrors

Objective: To imitate the movement of the teacher; to respond to the phrasing of the music with the help of the teacher by using hand movements.

Materials: Recorded music (suggested music: "Quite Time" from Hap Palmer's We All Live Together)

Procedure: Face the children. Encourage the children to pretend that they are standing in front of a mirror. Urge them to watch your movement carefully and to move exactly the way you move your arms. Make large sweeping movements with each phrase of the music moving you arms gracefully as in a ballet. Do not move your feet--just you arms. See how carefully the children can follow your flowing movements. After the children have had many experiences copying your arm movements, play the music and see if they can move their arms to interpret the phrasing on their own without watching you.

Evaluation: Observe to see how accurately the children imitate your arm movements. Observe to see if the children can move their arms in response to the phrasing of the music without watching an adult.

Creating Stories to Fit the Music

Objective: To interpret different moods in music by making up a story to go with the music.

Materials: Musical records of different varieties

Procedure: Have children listen to a musical selection several times. Then with the teacher's help, encourage them to make up a story that fits the mood of the music. Let them tell their story as the music plays.

Evaluation: Listen to the children's story to see how well their story fits the mood of the music.

Variation: The children might wish to "tell" their story through creative movement as the music is played.

Fun with Water Glasses

Objective: To compose a melody on the water glasses; to reproduce four tones played on the water glass.

Materials: Five glasses filled with varying amounts of colored water, two spoons.

Procedure: Show the children how to play a simple tune by striking the sides of the glasses with a spoon. Let the children experiment making sounds. Encourage them to experiment with the pitch by varying the levels of water in each glass. After they have had time to experiment, urge them to "compare" different melodies. Then ask them to make a simple tune of four sounds. Let another child try to copy the "tune" by playing the same four sounds. The children will improve with practice.

Evaluation: Observe the melodies that the children play on the water glasses. Listen to hear if the children can accurately reproduce the four sounds they hear on the water glasses.

Source: Mental Gymnastics p. 201.

Color Games

Objectives: To follow directions by listening to identify colors by following directions.

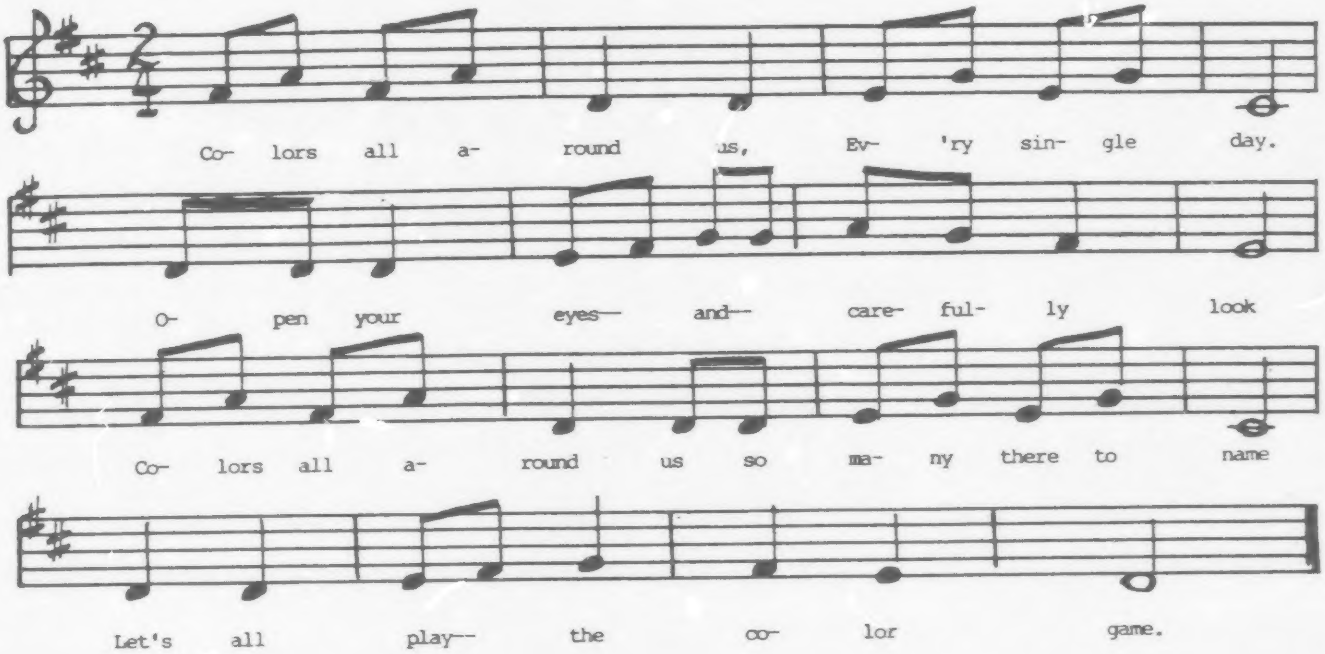
Materials: Strips of construction paper 2" by 4" in the following colors: blue, pink, white, black, purple, green, and red. (Be sure that every child has a complete set of these colored strips.)

Procedure: Sing the "Color Game" song and see if the children can follow the directions that you give as you sing. Avoid giving clues with your own hands. Make the children listen to follow directions.

Evaluation: Observe the children to see if they accurately follow your verbal directions.

Variations: Vary the colors of the paper strips you give the children. Substitute other color words in the song.

Color Game


Co- lors all a- round us, Ev- 'ry sin- gle day.
O- pen your eyes— and— care- ful- ly look
Co- lors all a- round us so ma- ny there to name
Let's all play— the co- lor game.

2. Can you find a blue card, touch it to your nose.
Put the pink card under your toes
What about a white one? Put it on your knee
Hold the black card up to me.

3. Now you listen carefully so that you can hear
Put the purple card behind you ear
Can you find the green card--Put it on your head
Now pick out--the card that's red.

Mary Jo Cliatt. Used with Permission

References

Bayless, Kathleen M. and Marjorie E. Ramsey, Music: *A Way of Life for the Young Child*. Saint Louis: The C.V. Mosby Company, 1978.

Calhoun, Gaye, Public Music Teacher for Grades 1-3, Oxford Municipal School District.

Cherry, Clare, *Creative Art for the Developing Child*. Belmont, California: Fearon Publishers.

Shaw, Jean M. and Mary Jo Puckett Cliatt, *Mental Gymnastics*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1984.

Stecher, Miriam B., Hugh McElheny, Marion Greenwood, *Joy and Learning Through Music and Movement Improvisations*, Ohio, Macmillan Publishing Company, Inc., 1972.

Bibliography

Songbooks

Listings are alphabetized according to publisher:

American Folk Songs for Children
Ruth Crawford Seeger
Doubleday & Co., Inc.
New York, NY 1948

Includes 90 favorite folk songs with guitar chording. The introductory chapters explain how to sing the songs, how to improvise on the words, how to use the songs at home and at school, how to use the rhythm and repetition, and how to use the humor and tone play of folk songs.

Eye Winker, Tom Tinker, Chin Chopper
Tom Glazer
Doubleday & Company, INc.
New York, NY 1973

Contains 50 fingerplays. There are familiar fingerplay songs and also familiar fingerplays newly set to music, as well as some beautiful new songs and famous folk songs with brand new fingerplays.

Mockingbird Flight
Patricia Hogland Nielsen, Floyd Sucher, and Charlotte D. Garmon
The Economy Company
Oklahoma City, OK 1975

An excellent source for young children's songs.

Pentatonic Songs for Young Children
Mary Helen Richards
Fearon Publishers, INc.
Belmont, CA 1967

Songs have voice range of six tones or less.

The Big Book of Favorite Songs for Children
Dorothy Berliner Commins
Grosset & Dunlap, INc.
New York, NY 1951

Contains 29 favorite songs of early childhood.

Jim Along Josie
Nancy and John Langstaff
Harcourt, Brace, Jovanovich, Inc.
New York, NY 1970

Collection of folk songs and singing games for young children. The book contains traditional singing games that involve the child in singing, dancing, and acting-out words. There are many action songs especially suited to the younger child. Included are piano accompaniments, guitar chords, and some optional percussion accompaniments for use with simple instruments.

Music for Fun
Music for Learning
Lois Birkenshaw
Holt, Rinchart, & Winston of Canada, Ltd.
Toronto, 1977
For regular and special classrooms

Music Resource Book
Lutheran Church Press
Philadelphia, PA 1967
Contains many action songs that are sung to traditional melodies. Teaching suggestions and chording for autoharp are included.

Wake Up and Sing
Beatrice Landeck and Elizabeth Crook
William Morrow & Company, Inc.
Collection of American folk songs with teaching suggestion, guitar chordings, and piano accompaniments.

Songs to Sing with the Very Young
Random House, Inc.
New York, NY 1966

The Animal Song Book
Edward Fisher
St. Martin's Press, Inc.
New York, NY
Includes songs about lions, porcupines, and other creatures; songs are excellent for creative movement.

Songs for Early Childhood
W. Lawrence Curry et al.
The Westminister Press
Philadelphia, PA 1958
Contains a wide variety of songs and music for very young children. Simple piano accompaniment is included.

The following music books are published by Bowmar Publishing Company, 4563 Colorado Boulevard, Los Angles, CA 90039:

Singing Fun
Louise Scott and Lucille Wood
1961
All-time favorite songbook and record for preschool and primary grades. Original songs of farm, circus, seasons, etc. delight children. 64 pages, soft-cover.

More Singing Fun
Louise Scott and Lucille Wood
1961
A sequel to Singing Fun with two records and original songs of the sea, Halloween, etc. 64 pages, soft-cover.

Rhythms to Reading Songbook
Lucille Wood
1972

A picture songbook that celebrates seasonal events. The songs are from the twelve records of the Rhythms to Reading program. The songs help the child make the transition from pre-reading to reading through action songs, rhythms, and singing games. Each song has a full-color informative picture. Suggestions for language arts and music activities are included with each song. 160 pages, hardcover, 12 1/4 x 11 1/3 inches.

Sing a Song of People Songbook
Roberta McLaughlin and Lucille Wood
1973

110 pages with 75 songs and 35 full-page original illustrations interpreting each of the songs in a colorful, childlike style extremely appealing to children. The artwork promotes language expression and develops motivation for musical experiences and interpretation through movement. Original and traditional songs are organized to develop cultural understandings and attitudes within the settings of holidays and seasons, home and community, and cultural neighbors, such as the Indian, Mexican, Oriental, and Black American. Included with many of the songs are teaching suggestions and autoharp accompaniment.

The Small Singer Songbook
Roberta McLaughlin and Lucille Wood
1969

112 pages of 125 familiar and new songs of action, dramatization, relaxation, counting, echoing, stories, seasons, and holidays. Repeated patterns and simple refrains with percussion and bell accompainiments are ideal for prekindergarten as well as primary grades. Delightful full-color illustrations. 9-inch x 12-inch cover.

MUSIC BOOK SERIES, PROGRAMS, AND HANDBOOKS

Listings are alphabetized according to publisher:

Music Activities for Retarded Children
David R. Ginglend and Winifred E. Stiles
Abingdon Press
New York 1965

An excellent handbook to assist parents or teachers in initiating a developmental music program for retarded children or young "normal" children.

MusicPlay - Learning Activities for Young Children
Leon Burton and William Hughes
Addison-Wesley Publishing Co.
Menlo Park, CA 1980

One hundred forty-four group and individual activities and games for early childhood that stress fun while investigating real music concepts. Also available: concepts set of recordings for all songs in MusicPlay.

Music for Early Childhood
Choate, Kjelson, Berg, Troth, Peterson
New Dimensions in Music
American Book Co.
New York 1980

672

Resource collection for teachers and parents of children through 5 years old. All the songs and related activities are based on children's interests and subject areas that are generally considered a part of the curriculum for this age.

The Music Book--Teacher's Resource Book for Kindergarten
Eunice Boardman and Barbara Andress
Holt, Rinehart & Winston
New York 1981

Contents: Exploring Music Through Moving, Singing, Listening, Playing Instruments, Reading, and Music for Special Times. Lesson plans are presented in a carefully structured step-by-step outline format.

The Spectrum of Music (with Related Arts) (kindergarten)
May Val Marsh
Macmillan Publishing Company, Inc.
New York 1974

Organized to help the teacher plan and teach in the most direct manner possible. It is divided into four areas. In each area one broad aspect of music is emphasized:

media - the voices and instruments that produce music
components - the ways in which sound is used to create rhythm, melody, harmony, and expression
structures - the ways in which the components of music are organized into musical forms
perspectives - the role music plays in our daily lives--ethnic, patriotic, holiday music

Each lesson employs a set of teaching strategies to enable the teacher to use the material most effectively. The book is oriented to the learner, and the text is written so that the children will learn as they explore the material.

Teacher's Guide to the Open Court Kindergarten Music Program
Betty Smith and T.C. Harter
Open Court Publishing Company
La Salle, IL 1970

The Open Court Kindergarten Music Program has a threefold purpose: [1] to provide encouragement and tools to enable the teacher to communicate a sense of joy in music to young children; [2] to provide a repertoire of traditional songs that children enjoy and on which they may build; and [3] to provide a wide variety of musical experiences so that each child may know success in some form of music. Each classroom unit includes a teacher's guide (containing music and lesson plans), a children's book for each child, and a set of four teaching records.

Growing with Music (Related Arts Edition)
Harry R. Wilson et al.
Prentice-Hall, Inc.
Englewood Cliffs, NJ 1970

The emphasis of the Growing With Music series is on the study of music as a significant learning. The intrinsic values of music and the contribution music makes to personal fulfillment have been given primary consideration in organizing these books. Contents of Book One include: Songs About Me, Mood In Music, Moving With Music, The World of Sound, Melody In Music, Words and Music, Acting Out Songs, Playing Instruments, Song Patterns, Fun Songs, Songs For Special Days, And Music For Movement.

Silver Burdett Music (teacher's edition)
Elizabeth Crook et al.
Silver Burdett Company
Morristown, NJ 1974

Helping children learn about music through participation, the Early Childhood Program develops skills and understandings through group and individual activities. Provides complete lesson plans in the concise, step-by-step outline form that most teachers find easy to use.

Making Music Your Own
Silver Burdett

Reaching the Special Learner Through Music
Sona D. Norcera
Silver Burdett Company
Morristown, NJ 1979

An excellent resource. Contains songs, poems, stories, and other activities. Gives suggestions for accommodating special learners in the music environment.

The Joy of Music
Roberta McLaughlin and Patti Schliestett
Summy-Birchard Company
Evanston, IL 1967

In addition to providing a large selection of songs for singing and listening, contains sections advising teachers on helping undeveloped voices, encouraging active response, learning through listening, measuring musical growth, experimenting with rhythm, melody, and harmony instruments, and many other essential phases of a child's introduction to music.

SOURCES OF RECORDS

Bowmar/Noble Publishers, Inc.
4563 Colorado Boulevard
Los Angeles, CA 90039

Capital Records, Inc.
1290 Avenue of the America
New York, NY 10019

Columbia Records
51 West 52nd Street
New York, NY 10019

Childcraft
Education Corporation
10 Kilmer Road
Edison, NJ 08817

Children's Book & Music Center
2500 Santa Monica Boulevard
Santa Monica, CA 90404

Decca Records
445 Park Avenue
New York, NY 10022

Disneyland Records
800 Sonora Avenue
Glendale, CA 91201

Educational Activities, Inc.
1937 Grand Avenue
Baldwin, NY 11510

Education Record Sales
157 Chambers Sreet
New York, NY 10007

Educational Recordings of America
P. O. Box 210
Ansonia, CT 06401

Folkways Records & Service Corporation
43 West 61st Street
New York, NY 10023

Folkways/Scholastic Records
50 West 44th Street
New York, NY 10036

Golden Records Education Division
Michael Bren Publications, Inc.
Port Chester, NY 10573

Honor Your Partner Records
P. O. Box 392
Freeport, NY 11520

Kimbo Educational
P. O. Box 477
86 South 5th Avenue
Long Branch, NJ 07740

Lyons Band
530 Riverview Avenue
Elkhart, IN 46514

MCA Records, Inc.
70 Universal City Plaza
Universal City, CA 91608

Melody House Publishing Company
819 Norhtwest 92nd Street
Oklahoma City, OK 73114

Michael Brent Publications, Inc.
Winding Wood Road
Port Chester, NY 10573

Scott, Foresman and Company
1900 East Lake Avenue
Glenview, IL 60025

Sing 'N Do Records
(Kimbo Educational)
P. O. Box 55
Deal, NJ

Youngheart Records
Box 27784
2413½ Hyperion Avenue
Los Angeles, CA 90027

Vox Publications, Inc.
211 East 43rd Street
New York, NY 10017

RECORDINGS

The following list of recordings is only a small sample of the number and variety of recording available for use with young children. Many come in both record and cassette form. Before purchase, it is best to write for catalogs to check for correct number and price. Bowmar/Noble Publishers, Inc., 4563 Colorado Boulevard, Los Angeles, CA 90039, has produced an excellent series that introduces people, their cultures, and musical traditions around the world.

Selected Recordings for the Very Young

Music for 1's and 2's CMS 649
Songs & Games for Young Children
Tom Glazer CMS Records, Inc.
14 Warren Street
New York, NY 10007

Lullabies for Sleepy-Heads CAS- 1003(3)
Dorothy Olsen
Camden--RCA Records

Lullaby Time for Little People LB9312
Lyons Band
    Kindergarten-1

Nursery Rhymes for Little People
Lyons Band
    Prekindergarten-1

Nursery and Mother Goose Songs 007 and 019
Bowmar

Singing

Nursery Rhymes--Rhyming & Remembering R 7660
Ella Jenkins
Folkways Records
    22 favorite nursery rhymes

Early Childhood Songs R 7630
Ella Jenkins
Folkways Records
    Nursery school youngsters singing simple songs that have been sung by generations of children

Counting Games and Rhythms for the Little Ones R 7679
Folkways Records

And One and Two R 7544
Ella Jenkins
Folkways Records
    Simple songs for preschool and primary ages

I Know the Colors in the Rainbow
Ella Jenkins
Educational Activities, Inc.

Nursery Rhymes for Little People KIM 0820
Kimbo Educational
    Preschool-first grade

677

Activity and Funtime Songs LP 200
Wonderland--Golden Records

Happy Times SG 1
Educational Recordings of America
P. O. Box 210
Ansonia, CN 06401
16 Singing Games for Young Children

Folk Songs for Little Singers 020
Bowmar

Songs to Grow On, vol. 1
Folkways Records

Singing Fun 001
More Singing Fun 003
More Singing Fun 004
Bowmar

Edgar Kendricks Sings for the Very Young FC 7556
Folkways Records

Little Favorites 007
Bowmar

The Small Singer 021 and 022
Bowmar

Singing Games 110 and 11
Bowmar
Prekindergarten-3

This-a-Way, That-a-Way R 7546
Ella Jenkins
Folkways Records

Holiday Songs & Rhymes AR 538
Hap Palmer
Educational Activities

American Folk Songs for Children R 7601
Pete Seeger
Scholastic

**Note: Hap Palmer's Learning Basic Skills Through Music, vols. 1 to V, has been very popular in helping children develop many different skills through music. These records can be obtained from Educational Activities, Inc., and other sources.

**Easy Does It AR 581
Hap Palmer
Educational Activities, Inc.
Activity songs for basic motor skills development

**The Feel of Music
Hap Palmer

Singing Games and Dances
Bowmar

Pretend AR 563
Hap Palmer
Educational Activities, Inc.
Pretending with movement

Creative Movement and Rhythmic Expression AR 533
Hap Palmer
Educational Activities, Inc.

**Moving AR 546
Hap Palmer
Educational Activities, Inc.
Collection of original music written for movement exploration and creative movement activities.

**Mod Marches AR 527
Hap Palmer
Educational Activities, Inc.

Patriotic and Morning Time Songs AR 519
Hap Palmer
Educational Activities, Inc.
Note: "Alley Cat," "Syncopated Clock," "Raindrops Keep Falling on My Head," "The Waltzing Cat," and many classical recordings are excellent to use for creative rhythms.

INSTRUMENTS

Homemade Band AR 545
Hap Palmer
Educational Activities, Inc.

**Modern Tunes for Rhythms and Instruments AR 523
Hap Palmer
Kimbo Educational Records

The Small Player 392
Bowmar
Music encouraging hesitant and musically inexperienced young children in free exploration and experimentation with rhythm instruments and movement.
Note: Many excellent compostions can be used to illustrate various instruments. One such example is "Peter and the Wolf"

FEELINGS, AWARENESS

**Getting to Know Myself AR 543
Hap Palmer Educational Activities, Inc.

Free to Be You and Me AL 4003
Marlo Thomas and Friends
Arista Records
1776 Broadway
New York, NY 10019

LANUGAGE AND READING

Feeling Free AR 517
Hap Palmer
Educational Activities, Inc.

A personalized approach to vocabulary and language development

Rhythms to Reading
Lucille Wood
Bowmar

A multimedia program that prepares children for success in reading, with opportunity for purposeful listening, following directions, singing, and movement; twelve book-and-record sets, filmstrips, picture songbook, etc. The recorded narrative and songs from each book develop reading readiness and musical sensitivity.

FILMS

The following films can be ordered and rented form the Audio-Visual Aids Center, Ken State University, Kent, Ohio 44242:

Learning through the Arts
Churchill Films 1967
Color (22 minutes)

Catches the natural reactions of four 4-year olds through experiences with language arts, responses to music and rhythm, and imaginative use of paint and clay.

Movement Exploration: What Am I?
Film Associates 1968
Color (11 minutes)

Shows children exploring movement, mimicking birds, animals, and machines.

BOOKS ON SOUND

Branley, Franklyn. Rusty Rings A Bell New York: Thomas Y. Crowell Co., Inc., 1957.

Brown, Margaret. The City Noisy Book New York: Harper & Row, 1939.
The Country Noise Book 1942
The Indoor Noisy Book 1943
The Seashore Noisy Book 1941
The Quiet Noisy Book 1950
The Summer Noisy Book 1951
The Winter Noisy Book. 1947

Dawson, Rosemary and Dawson, Richard. A Walk in the City New York: Viking Press, 1960.

Gramatky, Hardy. Little Toot New York: G.P. Putnam's Sons, 1939.

Keats, Ezra. Whistle for Willie New York: The Viking Press, 1964.

McGovern, Ann. Too Much Noise New York: Houghton Mifflin Co., 1967.

Skaar, Grace. What Do the Animals Say Reading, MA: Addison-Wesley Publishing Co., Inc., 1968.

Tresselt, Alvis. Rain Drop Splash New York: Lorthrop, Lee & Shepard Co., 1962.

REFERENCES

A Collection of Christmas Favorites, Baldwin Piano & Organ Company, Cincinnati, Ohio 45202.

Andre, Evelyn M., Editor, Spring Nursery Songs, Christian Studies for Methodist Children, Methodist Publishing House, Nashville, Tn 37203, 1966.

Andre, Evelyn M., Editor, Winter Nursery Songs, Christian Studies for Children in the United Methodist Church, Methodist Publishing House, Nashville, TN 37203, 1965.

Andre, Evelyn M. and Porter, Margaret, Editors, Nursery Songs for Fall, Christian Studies for Children in the United Methodist Church, The Methodist Publishing House, Nashville, TN 37203, 1970

Bayless, K. and Ramsey, M.E., Music: A Way of Life for the Young Child.

Butler, T.; Kirland, T.; Leach, B. and Adams, S., Music for Today's Children, Broadman Press, Nashville, TN, 1975.

Cliatt, Mary Jo Puckett, University of Mississippi: If I Teach You to Sing Will You Sing? (cassette tape of songs to sing in the classroom).

Cliatt, Mary Jo Puckett, University of Mississippi: The Old Woman Who Swallowed a Fly. (cassette tape of songs to sing with children).

The Golden Book of Favorite Songs.

Growing with Music, Teachers Edition 1, Prentice-Hall, Inc. Englewood Cliffs, N.J.

Growing with Music, Teachers Edition 3, Prentice-Hall, Inc. Englewood Cliffs, N.J.

Hilyard, Imogene, Music Consultant, Making Music Your Own, Silver Burdett Company Morristown, N.J., 1971.

Justus, May, Let's Play and Sing, Broadman Press, 1958

Key, Jimmy R., Editor, "Music Makers", Southern Baptist Convention, January, February, March, 1972.

Newbury, Josephine, Church Kindergarten Resource Book, Revised Edition, Convenant Life Curriculum, 1970.

Nocera, Sona D., Reaching the Special Learner through Music, Silver Burdett Company, Morristown, N.J., 1979.

Sing 'n' Celebrate for Kids, WORD, Incorporated, Waco, Texas, 1977.

Simon, William L. Ed., The Reader's Digest, Merry Christmas Songbook.

Songs of Christmas, The Economics Press, Inc., Fairfield, N.J. 07006.

Sur, William R., Senior Author, This Is Music, Allyn and Bacon, Inc., 1967.

The Walt Disney Song Book, Golden Press, N.Y., Western Publishing Company, Inc., Racine, Wisconsin.

Wessells, Katherine Tyler, The Golden Song Book, Golden Press, N.Y., Western Publishing Company, Inc., Racine, Wisconsin, 1972.

The World I Live In.

Wright, Cynthia, Tickle Tunes, Choristers Guild, Garland, Texas, 1978.

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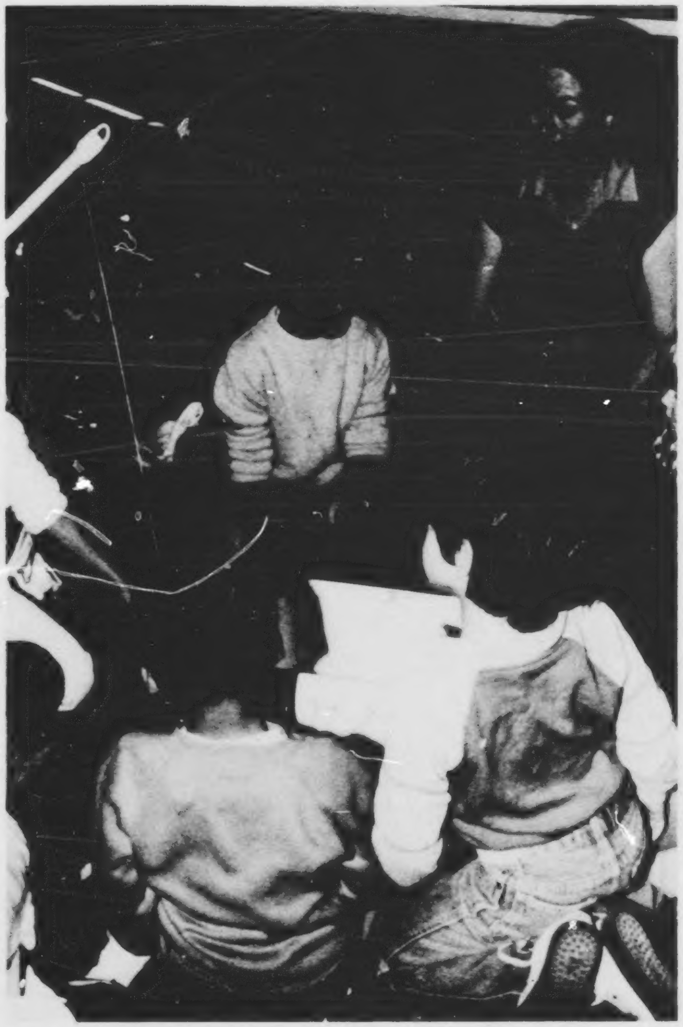
Utilization of Learning Centers



The following information provides a brief description of the various learning centers which should be considered in planning the kindergarten curriculum and program schedule. The ones described in this section are those basic to any classroom and can be expanded and/or used periodically during the school year. Developing or organizing new centers should be an ongoing project in which teachers and children plan and construct the center together as an outgrowth of a previous lesson or new topic of interest initiated by either the child or the teacher.

Several references are made in this resource book to the definition, need, and type of learning center to consider for the kindergarten program. Other State Department of Education materials which discuss the topic include: Implementing Kindergarten In Mississippi - An Administrator's Handbook, Development and Utilization of Learning Centers In The Classroom and the manual for segments 4-6 of the videotape series for training assistant teachers. At the conclusion of this chapter a bibliography is given to assist those interested in gaining more information with regard to the development and utilization of learning centers.

Management of Learning Centers

The following information regarding management of learning centers was taken from Personalizing Education for Children, disseminated by the Georgia State Department of Education.

Management of Learning Centers

Whole group planning sessions acquaint children with the learning centers and allow them to brainstorm activities for a learning center. Following a general discussion about the centers, small groups of children, under teacher direction, move to a center where the teacher models appropriate behavior and instructs the children in the prescribed learning tasks. Listed below are examples of ways to manage student participation in the centers.

Choice Boards

Name or picture of each learning center is displayed in a central location. Children select a center to begin work by taking a key or other symbol located beside that center name or picture. The number of symbols beside each center are limited to the number of children who may participate at that center at any given time. When a child is ready to move on to another center, he/she returns the symbol to the board and selects another symbol.

Pocket Charts

Located at each center, the chart allows each child to place his/her name card or picture card in a pocket of the pocket chart located at the center. The number of pocket openings will indicate how many children may work at the center at any one time.

Whatever means used, the procedure must provide the child with maximum independence. The child, at some point during the day, should be able to select and move from one to another center independently. New centers and new center activities are introduced gradually over a period of time. The teacher may effectively introduce new activity options by modeling activity options at the center.

After children have observed actual operation in a center, they will be more independent and successful in working at that center.

Learning Center Materials

Materials in the centers should be sequenced so that children ready to move ahead have a challenge and children that need practice have that opportunity. Even when the group has moved to a new level, activities should be present that incorporate the new information to that previously taught. Often children feel secure when they can move from the new to the familiar, incorporating the old with the new. Refer to the Equipment and Materials section of this resource book for specific center materials.

Evaluation of Learning Center Activities

Evaluation of learning center activities may be accomplished through the use of self-checking materials. Students can check themselves if learning materials are structured that will clearly define if the child's response to tasks is correct.

Teacher evaluation of the child's performance may be accomplished through observations made and recorded on checklists for further analysis. As work tasks are being completed the dialogue between teacher and student is extremely important in the evaluation process as determinations may be made regarding the logic and sequence of events which the child completes in order to arrive at the completed task.

In order to determine the successful utilization of each learning center with regard to student participation, children may mark a checklist roster upon completion of the tasks present. Other methods include the use of tokens or colored clothes pins marked with the child's name deposited in a basket upon completion of the tasks at each designated center.

Evaluation of center utilization and activities should be simple and requiring very little time on the part of the teacher or student, yet thorough and concise so that pertinent information can be obtained and used for improvement of teaching techniques and student achievement.

Math Materials and Manipulatives

Children's play with manipulative and math materials should be directed to provide a variety of problem solving experiences and to develop visual motor skills and fine motor control. While these skills are being developed, the children gain in perceptual maturity. They acquire bits and pieces of information that gradually come together in various combinations to form concepts. In a play environment, the children develop habits of observation, planning, and perseverance. Children manipulate materials in order to gain the conceptual background necessary to master learning tasks of various degrees of difficulty.

In providing manipulative materials, it is important to remain alert to the sequence of the child's growth. Children should have various shapes to handle, feel and examine; all types of objects which fit together and are easily disassembled; objects to connect and disconnect, to screw on and screw off; and objects to arrange and stack.

Those materials which, due to size and weight, require group interaction as well as the large number of materials encouraging individual reaction from students should be carefully reviewed prior to purchase. Close examination of the materials with regard to the substance with which the object is constructed, flexibility with regard to use, price, and attractiveness of the product are factors which must be considered in selection of the material.

MATH AND MANIPULATIVES

Variations	Materials	Activities	Possible learning or benefits
Pegboards	Various types of perforated board with pegs or tiles, cards with printed numbers	Children make own patterns; Provide pattern boards for children to match on peg-board	Color discrimination, number relations, patterns, fine motor skills
Parquetry or small table blocks Cuisenaire rods stern rods, etc	Blocks of different colors that can be fitted into a pattern; Materials of precise mathematical proportions	Use blocks to make designs, or patterns, compare proportions, shapes, or size of materials	Likenesses and differences, language for communication, names of shapes, colors, objects; social skill of game playing - taking turns, etc., terms alike, different
Matching games	Lotto or Bingo type games (commercial), matching shapes, or colors, matching numbers and quantities	Children can match letters, shapes, and colors. Match correct amount of object to numbers	Discrimination of color and balance; Care of materials; Counting; Fine motor skills; Number relationships
Puzzles	Inset puzzles	Many knob puzzles will stand on their end for make-believe. Children can progress from the very simple 3 or 4 piece puzzles to the more complex 15-20 pieces	Whole-part concepts, likeness, and differences, fine motor skills
Beads	Long strings with metal tips, large wooden or plastic beads of different colors and shapes	Let children make own pattern; Provide pattern boards for children to match	Color and shape discrimination, mathematics (number, longer, shorter), fine motor skills
Balance	A balance rod, cups to hang on it, jars of beans, stones, marbles, etc.	Children can compare weight of objects, experiment with measurement instruments	Equilibrium, discrimination of weights, problem solving
Counters	Objects in cans; beans, nuts, macaroni, stones, poker chips, plastic straws, abacus	Objects can be classified by use, color; Counting games made by the teacher or children	Classification, grouping, comparing: likenesses and differences, counting, one-to-one correspondence, vocabulary (more, less, same)

MATH AND MANIPULATIVES

Variations	Materials	Activities	Possible learning or benefits
Nesting or graduated objects	Nesting materials, materials that can be arranged in progressively larger sizes	Using the different sized materials children can create 3-diminsional structures; Arrange materials from lowest to highest	Larger and smaller, classification, seriation, vocabulary (like, different, same, more)
Alphabet	Cut-out plastic letters, sand paper letters	Children like to feel the letters; Put paper over a letter and with a crayon or piece of chalk make a rubbing	Letter recognition; alphabetic sequence

Block Construction

Block building gives the child a chance to think, to plan, and to solve problems while she/he moves freely and works with her/his hands. Building with blocks helps the child to understand more about sizes, shapes, and number concepts. She/He works, shares, and talks with other children as the child becomes involved in various learning tasks.

Carpentry tools and materials give children the opportunity to emulate adult behavior that intrigues them. As they become skilled in these activities, their feelings of accomplishment boost their self-confidence and self-esteem. Use of carpentry tools requires children to integrate their muscular movements with their visual reception.

Connecting pipes present a unique experience to children. More physical coordination and muscular strength are required to connect the pipes. They help children to plan and experiment with a different type of construction.

BLOCK BUILDING AND CONSTRUCTION

Variations	Materials	Activities	Possible learning or benefits
Blocks	Blocks of various sizes and shapes, toy animals and people cars and trucks	Making trains from blocks Making an airport from blocks; flying planes, selling tickets; packing doll clothes for a trip Making a farm using blocks, human figures, animals, etc. Making community-houses, barns, schools, churches Making roads and running cars and trucks Playing roles of community helpers	Cooperation, observations, mathematics (more, less, higher, shorter, number), self-expression, geography, (farms, zoos towns, houses), classification, seriation
Carpentry	Scrap lumber, nails, hammer, saw drill	Children can build own structure--Hammer nails in a 2x4 board; Saw a piece to fit a special need; This center requires constant supervision by an adult with only a small number of children	Cooperation, care of materials, safety balance, self-expression, hand-eye coordination
Pipes	Scraps of threaded pipes from plumber, elbows, wrench	Build a structure; Practice fitting pipes together - Talk about use of tools	Self-expression, physical properties of metals, mathematics (shorter, longer)

Sand and Water

Play experiences with sand and water are important for the young child. He/she needs to feel some control and management over her/his world. By pouring water and shaping sand the child experiences the satisfaction of managing time and materials successfully. Using sand and water, the child experiments without fear of making mistakes.

The medium of sand and water can very effectively be used also to teach various mathematical concepts. Measuring liquid and solid material allows children to make comparisons and engage in measurement related experiences which develop mathematical vocabulary and concepts.

SAND AND WATER

Variations	Materials	Activities	Possible learning or benefits
Sand and Water	Sand in a box, water pitchers, measuring cups, spoons, cans, basin, objects that will float or sink, sand sifter, water pipes, squirt bottles	Children practice pouring from one container to another; Run hands through sand or water; Sand-sift, pack, compare wet and dry sand, draw with fingers or stick, build sand sculpture (wet sand); Water measure--compare amount of water in different containers, how many cups to fill the pitcher, which objects float and which objects do not float, how are they different; Add soap and make bubbles	Release of tension, comparison of amounts, conservation of volume, absorption, buoyancy, displacement

Science

Science experiences should not be limited to those directed within the classroom. Consideration should be given to opportunities presented by the outdoor environment with regard to exploration, discovery, and development of thinking skills. The environment offers unlimited experiences for children to develop a scientific approach to problem solving if properly directed and involved. A learning center dealing with objects and/or learning experiences that serves to promote curiosity, logic, and sequencing of events can be considered science related. Manipulative activities which help to raise as well as answer questions should be planned and implemented to promote inquiry.

SCIENCE

Variations	Materials	Activities	Possible learning or benefits
Plants	Paper or styrofoam cups, earth, seeds, water, sweet potato, etc.	Plant bean seeds in half-pint milk cartons; When the seeds come up, put one plant in a dark cabinet; Put the others in the window where they will get sunlight; Water all plants; Discuss what happened to the one in the dark cabinet	Plant needs for growth, germination, problem solving
Aquarium	Tank, water, sand, filter, fish plants, magnifying glass	Mother fish having babies shows that animals reproduce their own kind Place several inches of sand and pretty rocks in the bottom of the acquarium; Wash rocks, children may bring and sterilize with boiling water; Place water plants in the aquarium and snails to keep aquarium clean; Snails are scavengers and will help keep down algae in the aquarium.	Aquatic life forms, release of tension, curiosity and wonder, sense of discovery
Magnets	Magnets of different sizes, objects of various materials (metal and non-metals)	Provide a selection of metal and non-metal items; Children can classify the items attracted to the magnets and the items repulsed by the magnet; Request that the children name the material that makes up each item	Attraction and repulsion, properties of magnets
Light, Magnification, Color	Magnifying glass, kaleidoscope, colored plastic sheets, mirror	Provide dry tempera, water, mixing pans, and brushes for color experimentation; Red and yellow make orange; Blue and yellow make green; Red and blue make purple; Black makes colors darker; White makes colors lighter	Aesthetic appreciation, colors, mixing colors, reflections, sense of discovery

SCIENCE

Variations	Materials	Activities	Possible learning or benefits
Soap bubbles	Several cans, soap chips, glycerin, water, plastic straws, wire hoops	Mix water, soap, glycerins in a paper cup or baby food jar; Let children blow through the straw placed in the container; Ask how does the mixture change; Dip wire hoops in the soapy water; Blow through the wire hoop; Discuss what happens	Breath control, duration, refraction, pleasure
Magnifying glass	Magnifying glasses of different sizes	Examine small insects, dark, leaves, etc.; hair; snow; and numerous other available things; Place bread in dark place and let mold; Examine mold and identify as a type of plant	Realization of small unknown world, questioning, experimentation

Language

Most activities and opportunities presented to children in kindergarten are language related. Development of receptive as well as expressive vocabulary is a continuous process interwoven throughout all curriculum areas and learning center activities. As preparation for reading the child must be engaged in activities which stimulate, motivate, and acquaint the child with language in both oral and written form. Competence in language comes through constant exposure to words and printed material.

Experiences which promote conversation and discussion help to broaden language usage and comprehension. Experience charts and word games based on association with the concrete or representations of objects help the child to conceptualize the process of spoken word transferred to written word and then available for reference through "reading."

LANGUAGE

Variations	Materials	Activities	Possible learning or benefits
Books	Shelves, books, rug, cushions, rocking chair, display racks, pictures, flannel board, flannel figures	Placing figures on flannel board in sequence to tell a familiar story Placing figures on flannel board to show a story in a sequence by referring to story illustrations in a book Recognizing and commenting on material in books Repeating familiar nursery rhymes when seeing illustrations of these in books Choral reading using simple nursery rhymes and poems Dramatizing a story without props Browsing picture books	Association of written words (symbols) with spoken, appreciation of stories, sequence of events, communication of ideas, socializing influence
Communication	Tape recorder, cassettes	Child re-telling story into the tape recorder Using photograph of child and letting child make up story about himself Listening to ballads or stories and looking at pictures in book (Set up by teacher) Listening to records of familiar stories and following pictures in a book (S[illegible] up by teacher)	Practice in communication and use of oral language, imagination, self-expression, sequence, verbalization of feelings and impression, self-concept

Dramatic Play

Dramatic play experiences occur continually as children interact with each other in a flexible environment such as the one found in the dramatic play center. Behaviors children learn from observing other people and situations are demonstrated and internalized through role play, imitation, and dramatic play activities. These dramatic play experiences give children the opportunity to evaluate the actions and behaviors of those people with which they come in contact. It allows them the opportunity to conclude things regarding their lives and environment. It provides a method for them to integrate what they are learning, doing, and feeling, as well as what they have previously experienced, want to experience, and think they are expected to experience.

Children elaborate on their imitations in order to try to find meaning in the actions of people in their environment. Role playing encourages them to use symbolic objects in place of the real thing. They learn that they can use this means of play as a legitimate outlet for emotions, especially negative ones.

As they become more experienced at role playing, they learn to separate what is make-believe from what is real. They learn that there are many different ways of expressing emotional feelings, and with this knowledge comes an increased ability to control those emotions.

DRAMATIC PLAY

Variations	Materials	Activities	Possible learning or benefits
Housekeeping	Dolls, doll furniture, dress-up clothes, dishes, cutlery, cleaning implements, telephone; add food, flowers, etc. as play	Cutting, spreading with a knife-child experiences terms in play and learns to tell what he is doing Helping prepare foods for tasting: small sections of grapefruit, oranges, lemons, pumpkin, coconut, etc. Washing dishes and drying dishes Washing doll clothes Dressing baby doll; buttoning, snapping, zipping, typing, etc. Giving baby a bath; rocking	Self-expression, language for communication, social roles, one-to-one correspondence, belonging, identity, self-concept problem solving
Store	Play money, shelves, empty cans and cartons, purses, hats	After field trip to grocery store or fruit stand, let children create their own store with items to sell and make own money	Names of coins, one-to-one correspondence, buying and selling, social exchange, language
Doctor's	Uniforms, play thermometer, stethoscope, flashlight, spoons, used pill boxes, sugar pills, or M & M's, throw-away syringes (minus the needles) bandages.	Set up doctor's office, hospital, or sick room; Let children listen for their own heart beat; Exercise, then listen to heart beat again How did it change? Invite doctor to visit classroom	Reduction of fear of doctors, social roles, health care; language for communication
Post Office	Play money, used stamps, and envelopes, paper and pencils, scales, caps	Field trip to post office to mail Valentines or get-well card to sick student; Make mail box for each child Let children send messages or cards to each other	Sending messages, buying and selling, communication forms (symbols)

Variations	Materials	Activities	Possible learning or benefits
Restaurant	Tables and chairs, cutlery, dishes, aprons, paper napkins simple foods (apple, crackers lemonade), play money	Let children arrange restaurant, make up menus, prepare food to serve, provide any entertainment	Social exchange, language for communications, one-to-one correspondence, self-expression
Puppets	Hand puppets	Children may make own puppets; Present an original play, role-play different emotions	Self-expression, language communication, sequence, self-concept, creative thinking

Art

Art activities give children special opportunities to use their hands, fingers, and small muscles. The experiences also allow for development of fine motor control and visual-motor perception, skills necessary in order to read. The child develops an awareness of similarities and differences of colors, shapes, lines, texture, symbols, and art materials. Art experiences increase the child's perceptual awareness and provide opportunities for him/her to learn to classify and categorize.

Experimenting with a variety of art materials, children learn that it is possible to express feelings and emotions through the selection and manipulation of materials. They learn to use their imagination, invent new shapes and ideas, and as they mature, they learn to use art as a means of communicating with others.

Through paints, crayons, clay, paper and paste, the child is able to express his ideas. She/He learns that each of us approach tasks differently and that the completion of those tasks generates feelings of satisfaction and self acceptance.

ART

Variations	Materials	Activities	Possible learning or benefits
Painting	Water mixed tempera paints, brushes, old shirts for smocks, paper sponges and water, table or easel	Easel painting	Discrimination of colors, properties of paints, expression of feelings and concepts, care of materials, creativity, fine motor skills
		Making designs by placing open end of cup in tempera and stamping paper	
		Painting with large sponge	
		Cutting sponges into small pieces and pressing on paper to make design	
		Dipping string in tempera and pulling across paper	
		Blowing through straw to move several colors of tempera along paper	
		Mixing tempera to make new colors	
		Placing layers of newspaper on floor and painting with brushes	
		Dipping brushes in water, then in dry tempera and painting	
Clay	Modeling or salt-and-flour clay, sticks, rolling pin, table knives	Rolling clay into small and medium sized balls	
		Rolling a ball and punching make a small bowl	
		Rolling clay into long ropes	
		Winding ropes to make an object	

ART

Variations	Materials	Activities	Possible learning or benefits
		Making animals and people by sticking isolated parts together as sticking head, arms, legs on a body Pulling out legs, arms, heads from clay to make animals and people Make abstract forms from clay	Expression of feelings and concepts, development of imagination, creativity, fine motor skills
Crayons	Crayons and paper, flat materials of different textures	Crayoned pictures washed with tempera	Expression of feelings and concepts, development of imagination, colors, textures, creativity, fine motor skills
Scissors and paste	Scissors, paste or glue, paper catalogs, and magazines	Cut out objects, shapes to paste and make a picture; Paste cut/torn pieces of tissue paper to cover a jar-then place a small candle inside; Paste different size boxes together to make forms, then paint	Likenesses and differences and expansion of vocabulary, matching, self-expression, color discriminations, fine motor skills
Collage	Paper or paper plates, variety of scrap materials (may be collected on nature walk)	Abstract collage made with torn or cut paper Abstract collage made from various textured materials Paper mosaics made with torn or cut paper Collage of human figures (body parts and clothes made from different kinds of paper) Animals from cut geometric sha[illegible]	Textures, self-expression, observation, aesthetic appreciation, creativity, fine motor skills

ART

Variations	Materials	Activities	Possible learning or benefits
		Torn paper pictures pasted on background	
		Mobiles-cut and torn paper	
		Animal farms cut, covered with mosaic design, and stapled together	
Murals	Kraft paper, newsprint or salvaged wrapping paper	Depicting a field trip	Reinforce and extend concepts, language development, problem solving, outlet to express experiences
		Sequences in a story	
		Steps in planting seeds and watching them grow	
		Kinds of toys	
		Kinds of weather	
		Going on a picnic	
		A trip to see grandmother	

Music

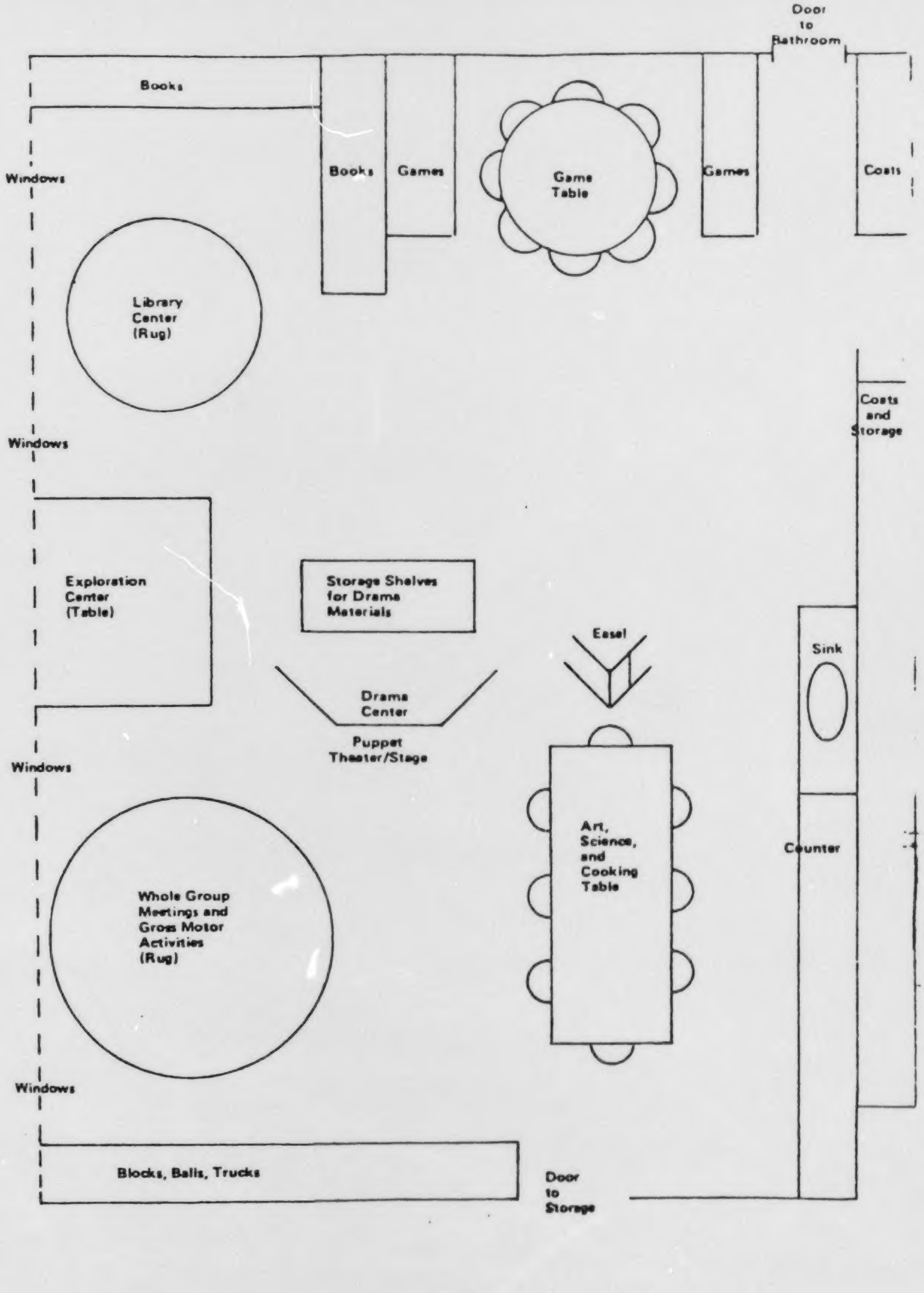
As a result of musical experiences, children have many opportunities to develop auditory perception and auditory motor control. They also develop a positive feeling toward musical activities and become able to coordinate the musical sounds and rhythmic beat of what they hear to different ways of moving. Listening to and producing music intensifies the awareness of such words as slow and fast, soft and loud, happy and sad, softer, louder, the same as, and other concepts. They learn to identify various sounds, rhythms, and tunes.

MUSIC

Variations	Materials	Activities	Possible learning or benefits
Rhythm instruments	Drums, rattles, sandpaper, blocks rhythm sticks, tambourines, bells	Experiment with a variety of rhythms and songs as children play their instruments with them; Echo-one child beat the rhythm, the rest repeat that rhythm	Aesthetic appreciation of self-expression, rhythms, movements, sound discrimination
Listening	Record player, records, scarves streamers	Move to the rhythm of the song-use scarves, crepe paper strips, house balloons in the air; Introduce classical marches, modern music	Aesthetic appreciation, rhythm, sound discrimination, self-expression, movement

Learning Center charts adapted from:
York, Mary Elizabeth, "Learning Centers in the Early Childhood Classroom", in Golubchic, Leonard and Persky, Barry, Early Childhood Education, Wayne, New Jersey: Avery Publishing Group, Inc., 1977, pp. 119-121.

Several diagrams are given elsewhere in this book as examples of how the classroom might be organized to accommodate learning centers. Included in this section are two more to serve as a guide or thought starter for teachers as they plan and arrange the learning environment.


Door to Bathroom
Books
Windows
Books
Games
Game Table
Games
Coats
Library Center (Rug)
Windows
Coats and Storage
Exploration Center (Table)
Storage Shelves for Drama Materials
Easel
Sink
Drama Center
Puppet Theater/Stage
Windows
Art, Science, and Cooking Table
Counter
Whole Group Meetings and Gross Motor Activities (Rug)
Windows
Blocks, Balls, Trucks
Door to Storage

Georgia Department of Education, Kindergarten in Georgia, 1981.

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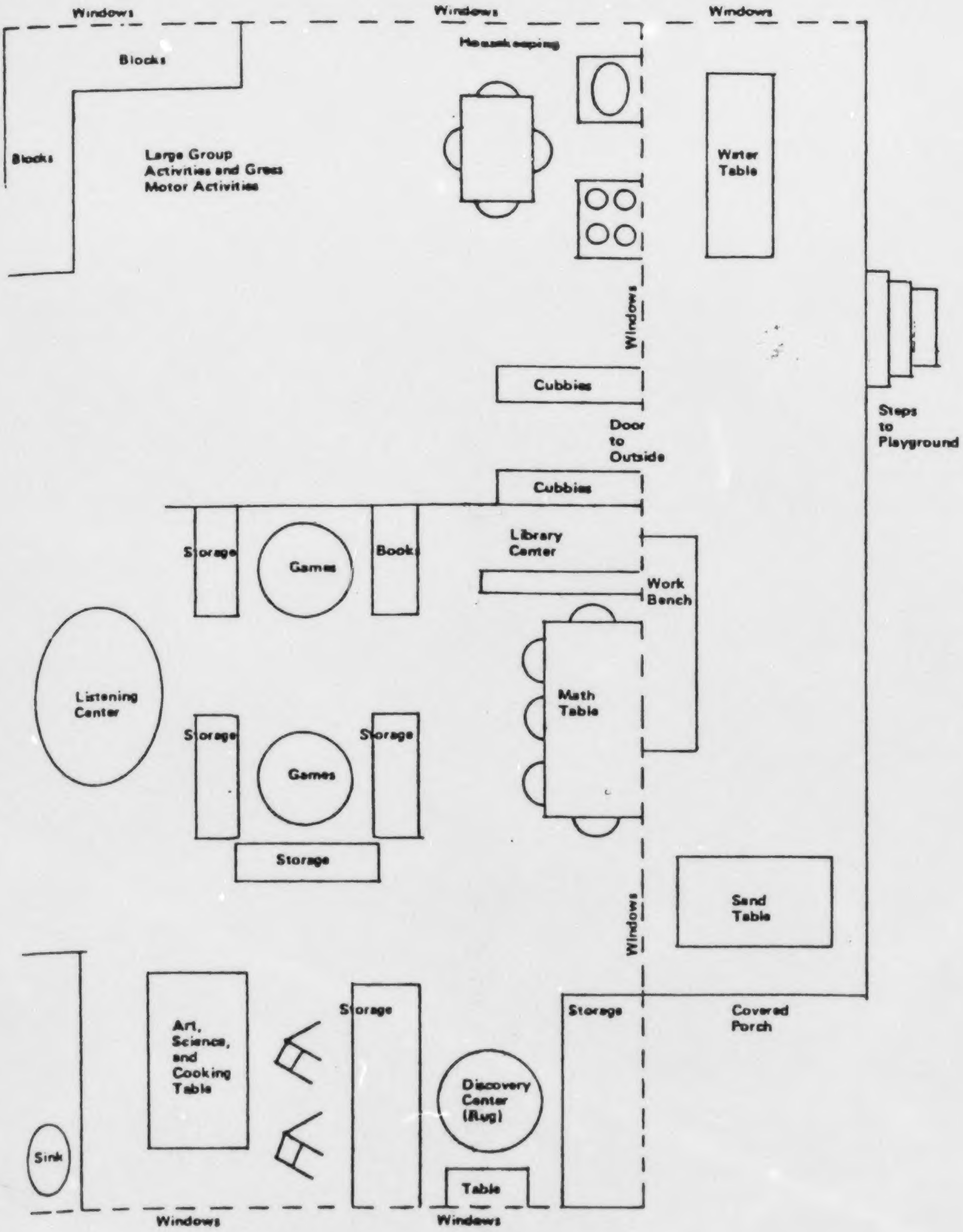
Windows
Windows
Windows
Housekeeping
Blocks
Blocks
Large Group Activities and Gross Motor Activities
Water Table
Windows
Steps to Playground
Cubbies
Door to Outside
Cubbies
Storage
Games
Books
Library Center
Work Bench
Listening Center
Math Table
Storage
Games
Storage
Storage
Windows
Sand Table
Art, Science, and Cooking Table
Storage
Storage
Covered Porch
Discovery Center (Rug)
Sink
Table
Windows
Windows

Georgia Department of Education, Kindergarten in Georgia, 1981.

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INTEGRATION OF CHILD DEVELOPMENT INTO LEARNING CENTERS(1)

Learning Center Theme and Activity	Physical Development	Intellectual Development	Affective Development
Construction Center Theme: Space Travel. Child Selected Activity: Build space tower.	The child develops arm and hand precision by constructing tower.	The child integrates previous observations with new experience.	The child willingly participates with other children in building tower.
Library Center Theme: Space Travel. Child Selected Activity: Listen to story about an astronaut's travel in space.	The child develops hand and finger dexterity by operating listening post and turning pages of picture book.	The child verbally recalls events of story in order.	The child listens to another child's response to story.
Cooking Center Theme: Space food. Child Selected Activity: Mix orange drink.	The child develops hand and finger dexterity by mixing orange drink.	In small group discussion the child recalls food eaten by astronaut.	The child willingly participates with other children in preparing a menu.
Art Center Theme: Space Travel. Child Selected Activity: Paint/and or draw and color a sequenced scene related to space theme.	The child develops fine motor control, hand-eye coordination, visual perception.	The child initiates various shapes and designs to represent an idea.	The child participates as a group member contributing to the completion of a project to be shared by all.
Dramatic Play Center Theme: Space Travel. Child Selected Activity: Acting out situations related to space travel.	The child uses large and small muscles in acting out the various roles and situations created by the child and/or teacher.	The child demonstrates thinking skills as he/she creates problems and ways to solve them through dramatic interpretation of situations.	The child feels successful in solving problems and/or developing solutions to situation posed through "make-believe."

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(1) Adapted from Georgia State Department of Education, Personalized Education for Children, 1982.

General Theme: Colors

Specific Theme: Recognizing Three Primary Colors

Objective: Child will be able to visually recognize red, blue, and yellow primary colors.

Assessment: The objective can be assessed as the teacher observes the child's participation and selection of colors being taught.

Learning Centers Activities:

Creative Art Center: Children may design and make various objects of their choice using red, blue, and yellow clay.

Cooking Center: Allow the children an opportunity to select their choice of kool-aid to represent one of the colors being taught. Have them measure water and sugar then mix and use for snack.

Science Center: Children will be introduced to physical science by observing a change in a substance. Place two clear plastic cups half filled with water on the table. Let first child squeeze five drops of red food coloring into one cup, then have the second child squeeze ten drops of blue coloring in the other cup. Notice a change in color; the second cup should be darker than the first cup. Next have large group setting and encourage to sing "Mary, Mary Has A Red Dress On." Substitute children's own names and describe the color of clothing they are wearing.

Water Play Center: Place a large plastic pan on the table half filled with water. Have children add blue food coloring to the water. As they observe and discuss the change in color, children may use plastic animals to continue water play.

General Theme: Geometric Shapes

Specific Theme: Circle

Objective: The child will be able to identify, match and reproduce a circle.

Assessment: Teacher will observe child's ability to make and use circles in different activities.

Learning Centers Activities:

Language Arts Center: After teacher's introduction of the circle to the large group, provide each child with a worksheet with pre-drawn circles, squares and triangles and a piece of red crayon. Instruct children to find all circles and color them red.

Creative Art Center: Place circles that have been cut from sponges, assorted colors of construction paper, and containers for tempera paint. Instruct children to dip circle shaped sponges into paint, and then make different designs on construction paper.

Block Center: Have children select all round blocks and construct buildings of their choice.

Math Center: Place in order five pre-cut circles of different sizes on table. Have children count circles beginning with largest and ending with the smallest. When they have mastered this, mix circles and have children arrange in order according to size.

Cooking Center: Have children make no-bake cookies. (recipe of teacher choice) Use different sizes of round shaped cookie cutters to cut out dough. Cookies may be used for snack.

General Theme: Body Awareness

Specific Theme: Body Parts

Objective: The child will be able to develop a positive self-image and locate and identify body parts.

Assessment: The teacher will assess an activity through observation and the children's response to locating body parts upon request.

Learning Center Activities:

Language Arts Center: To teach the children to recognize their own name, make an attendance chart on a large poster and a name tag for each child. Scatter name tags on the table and assist the children in finding their own name, placing it in the attendance chart each day. This can be done until the children are able to recognize their names independently.

Math Center: Trace each child's hands; label and cut out. Place them on a table, and have children count and sort them according to sizes.

Creative Art Center: Have children look into a floor length mirror. Ask them to draw a picture of themselves including as many body features as they can remember.

Housekeeping Center: Have on display a variety of children and adult clothes. Children may dress up and dramatize roles of themselves as well as other family members.

Music Center: Direct the children to do the Hokey Pokey and other creative dancing using their body parts to develop large and small muscles. They may also sing and act out "My Head, My Shoulder, My Knee, My Toe."

Woodwork Center: Children may use various sizes and/or shapes cut and pasted from cardboard to construct real and imaginary people and creatures.

Outdoor Center: (An extension of indoor activities) To help children develop rhythm and movement, have them form a large circle on the playground. Ask them to sing and act out the song below to the tune of the "Farmer In The Dell."

Verse 1
I've got a head, you've got a head
I can shake my head
That's what I can do.

Verse 2
I've got two feet, you've got two feet
I can stomp my feet
That's what I can do.

Continue, using other parts of the body.

General Theme: Community Helpers

Specific Theme: The Mailman

Objective: The child will be able to identify the mailman from a series of wooden people, also recognize their own name and house address.

Assessment: Teacher's observation as recorded on checklist

Learning Center Activities:

Language Arts To assist children with recognizing their full name and home address, write each child's full name and address on a legal sized envelope. Cut out letters for each child's name and address and place inside of envelope. Children will remove letters from envelope and match with letters printed on outside of envelope.

Block/Wheel Toy Center: Children will be encouraged to plan and build a model community, with a post office, from unit blocks. They may use toy wooden trucks as mail trucks to pick up the mail at the community mail boxes and deliver to the post office.

Creative Art Center: Draw an outlined picture of a mailman without a hat on a sheet of art paper. Provide a blue construction paper hat and glue. Have children paste on hat and color uniform blue.

Math Center: Place a flannel board along with flannel backed numerals 0-9 on table. Allow children to arrange numbers in order as they appear in their home address.

Dramatic Play Center: Set up the dramatic play center as a model post office. Provide an area where children may purchase stamps and sort mail. Use shoe boxes as individual mail boxes. Make a mailman bag by using a large sized paper bag. First fold down the top of bag six inches from the top. Use strips of cloth stapled to each side of bag to make straps. Allow children to dramatize the role of mailman.

General Theme: Transportation

Specific Theme: Land Transportation

Objective: The child will be able to identify a car, truck and bus and respond to their use through role play.

Assessment: Teacher's observation and children's participation as recorded on checklist.

Learning Center Activities:

Creative Art Center: Children will be given an opportunity to become creative by through the use a variety of magazines, paste, scissors and construction paper. Instruct children to cut out and paste on different vehicles that travel on land.

Language Arts Center: Glue several pictures of various land transportation vehicles on poster boards. Cut in half and mix; then have children find and match the two halves that are the same.

Science Center: To help children develop problem-solving skills, provide several toy cars, trucks, tractors, buses and vans. Allow children to remove wheels and tires, and then re-assemble parts removed. Discuss problems encountered as they re-assemble the parts.

Outdoor Learning Center: Select an area on the playground free from the flow of traffic. Have children bring from the classroom several large hollow blocks, wooden cars, trucks, etc., and various sizes of labeled cardboard boxes. Allow children to set up and pretend they are managing a weigh station, working at a gas station, or operating their own garage.

Block/Wheel Toy Center: Children should be free to choose various sizes of blocks to construct a garage, bus station and streets. Small toy wooden vehicles should be available for the children to manipulate and use in role play.

Dramatic Play Center: Make cars, trucks, and buses from large cardboard boxes and label. Children may then dramatize family trips; riding to school on a bus or other family trips.

General Theme: Traffic Safety

Specific Theme: The Traffic Light

Objective: The child will be able to identify the red, yellow and green traffic signals through the use of colored circles.

Assessment: Teacher will observe children to insure that they understand the function of each traffic light signal.

Learning Center Activities:

Language Arts Center: After the teacher has introduced to the group the three traffic signals by color, each child is provided with a worksheet with several rows of circles of different colors, four columns per row. On each row include a red, yellow, green circle, and one of another color. The child will look at the circles and put an X on the circle that's not found on a traffic light.

Science Center: Provide red, yellow and green modeling clay for children to create their own traffic light.

Math Center: Place on a table several different sizes of red, yellow and green circles cut from construction paper or posters. Have children sort and group according to size.

Creative Art Center: Give children pre-cut red, yellow, and green circles, and a large piece of cardboard or poster. Have children paste the circle on cardboard or poster to make a traffic light. Observe for order in which they are placed.

Block/Wheel Toy Center: Children may construct a miniature city from a set of wooden unit blocks. With small wooden or toy cars, trucks and buses, have children practice obeying traffic signals using the traffic signals made in creative arts center.

General Theme: Animals

Specific Theme: Farm Animals (Any animals could be used as a specific theme.)

Objective: The children will be able to identify the cow and the pig from a set of rubber farm animals.

Assessment: Teacher's observation of children's discussion and action with record made on a checklist.

Learning Center Activities:

Language Arts Center: Discuss with the children each farm animal and provide pictures to illustrate the food and clothing sources they provide for our livelihood. Next, provide puzzles of various farm animals, have children assemble each puzzle in learning center.

Science Center: Provide modeling clay for children to create and design the different farm animals discussed in language arts group discussion.

Math Center: To help the children develop number recognition and sequencing, make two pig puzzles from a poster board. Cut into five parts; on one side of the puzzle parts write the numerals 1-5, on the opposite side write numerals 6-10 beginning at the tail each time. Instruct the children to assemble the puzzle pieces in numerical order.

Creative Art: Provide a variety of art materials such as manila paper, construction paper, pencils, crayons, water colors, and paint brushes. Allow children to draw and color pictures of farm animals already discussed.

Block Center: Encourage children to build a farm area including a barn and a fence from wooden unit blocks. They may also use toy trucks to transport the animals from one place to another.

General Theme: Fruit

Specific Theme: The Apple (Any fruit or vegetable could be used.)

Objective: The child will be able to identify the apple from other fruits.

Assessment: Teacher observations with record made on assessment checklist.

Learning Centers Activities:

Language Arts Center: After discussion about various fruits, provide a worksheet for each child with three columns, and a piece of crayon. In each column, include pictures of other fruits, and vegetables and at least one apple. Children will find and color pictures of all apples.

Science Center: Place an assortment of seeds and small containers on table. Have children sort seeds according to likenesses and place in containers.

Creative Art Center: Make a large tree and place on bulletin board. Have children make apples from red and green construction paper. Let them paste the apples on the tree. Teacher or child may print their first names on apples for identification.

Math Center: Cut out ten miniature trees and apples. On the trees write numberals 1-10. On apples write numeral words, one to ten. Have children match apples with the appropriate tree.

Cooking Center: Assist children with making play dough using red food coloring. Provide plastic fruit-shaped cookie cutter, and have children cut out cookies from dough. They may pretend to bake these in housekeeping center.

As a snack, let children taste at least one of these apple food items-apple juice, apple slices, make apple sauce.

Housekeeping Center: Provide a variety of plastic fruits. Allow children to role-play gathering, washing, and cooking apples.

General Theme: Christmas

Specific Theme: The Christmas Tree

Objectives: (1) The child will be able to identify a Christmas tree from a variety of other trees; (2) recognize capital and small letters of the alphabet, and (3) match numerals 1-25.

Assessment: Teacher's observation of children's ability to utilize materials and work independently through a checklist format and/or identification game.

Learning Center Activites:

Language Arts Center: (1) Discuss with children the origin of the Christmas tree. Show them pictures of various trees. Identifying the Christmas tree while discussing the pictures; request the children to point to the picture card of the Christmas tree. (2) Have twenty-six small Christmas trees cut from green construction paper, and twenty-six rectangles for the base of the tree cut from brown construction paper. Write the capital letters on the trees and the small letters on rectangles. Mix these together and have children match base of tree to the appropriate tree. After they have mastered this skill, have them arrange the trees in alphabetical order.

Creative Art Center: Provide each child with a styrofoam meat tray with a hole at the top, several multicolored sheets of construction paper, glue and yarn for ties. Children may work independently making a Christmas tree collage. This can be used to give their parents as a Christmas gift.

Block Center: Children may use a set of parquetry blocks (includes triangles, squares and rectangles) to construct various sizes of Christmas trees. They may also use wooden toy trucks to transport the trees to their make believe homes and stores.

Science Center: Provide children with modeling clay of different colors. Allow them to create and form various colors and shapes of Christmas trees.

Music Center: Children may listen to "O Christmas Tree" from a record or recording. Later they may sing the song as a group.

Math Center: Make four Christmas trees from a green poster. Cut out sets of ornaments from multi-colored construction paper. Write numerals 1-25 on each set of ornaments. Glue one set of ornaments on trees; have children match a second set of numerals with those on trees.

General Theme: Cultural Awareness

Specific Theme: People

Objective: Child will be able to identify specific characteristics of their own culture and identify similarities and differeness in people of other cultures.

Assessment: Teacher's observation of children's participation and discussion. May be recorded in checklist fashion.

Learning Centers Activities:

Language Arts Center: First discuss with group what one's culture means and show pictures relating to discussion. Place several pictures that have been mounted on 8" x 10" poster boards which represent people from different racial backgrounds, yet with similar interests, such as their occupations, hobbies, dress, and family situations. Ask the children to sort the pictures according to action in picture, and not according to what race the picture may represent.

Music Center: Provide records or recordings of people from different cultural backgrounds. Children may listen and perform to music.

Science Center:	Have available several colors of modeling clay. Allow children to manipulate and create body features as they blend in different colors of clay together.
Creative Art Center:	Paints and crayons should be available in colors that approximate accurate skin tones. Allow children to draw and paint pictures of their choices.
Housekeeping Center:	Provide clothing, puppets, and male and female dolls that represent the cultural background of each child in the classroom. Allow children to role-play real life situations.
Cooking Center:	Parents should be notified in advance concerning this teaching unit. Have children bring in simple recipes/ ingredients from home. After food experiences, have children compare ingredients, preparations, and taste of foods.

CHECKLISTS FOR PLANNING, USING, AND EVALUATING LEARNING CENTERS

1. Study educational goals and decide upon the type of center:
   A. Is the center appropriate to the educational goals? Would another method of individualization be more appropriate?
   B. What are the purposes which the center will serve?

2. Specify objectives
   A. What objectives of the curriculum will be met in this center?
   B. How do my objectives relate to the interests, skills, and talents of the children?
   C. Is there sufficient space for this center? If not sufficient space how can I modify my plans for the center and still have it function effectively?
   D. How will I communicate my objectives to the children (i.e., tape recorder, task cards, oral directions, peer instruction)?

3. Choose the optimum space and determine the center's design:
   A. How much space can I allocate to the center?
   B. Will there be more than one center in the room?
   C. How might the children's size and motor skills affect their use of space?
   D. What equipment and furniture are needed?
   E. Will the location of the center affect other classroom activities? How?
   F. Does the center require special physical/environmental conditions (e.g., electronic outlets; sunlight)?

4. Gather needed furniture and materials:
   A. Are the needed furniture and equipment available in the classroom, school, school system, community?
   B. Can older students, parents, aides, volunteers collect or construct necessary furniture and equipment?
   C. What instructional materials are needed?
   D. Will each material match a specific instructional objective?
   E. Are the materials available in the classroom, school, school system?
   F. Do I have resource materials (e.g., idea books) to aid me in developing materials?
   G. Can parents, aides, older students help me in gathering and/or making materials?

5. Designing learning materials:
   A. Are the materials consistent with my instructional goals?
   B. Do they meet the needs of my students?
   C. Are there at least two different materials at each level of difficulty? For each learning style?
   D. Do the materials reflect the varied interests of the children?
   E. Are the directions clear? Do the children know:
      1. What to do with materials?
      2. What to do with the materials when they have completed them?

   F. Are the materials easily accessible to the children?

G. Is there a variety of media and materials (e.g., games, books, filmstrips, construction activities)?

6. Prepare instructions for students use of the center:
   A. How many children can use the center at one time?
   B. Will students choose the center or be assigned to it?
   C. How will I implement student choice of center? Assigning students?
   D. Are the directions for the use of materials and activities available to the children? Do they understand them?
   E. What are the rules for behavior at the center?
   F. How will students choose materials and activities in the center?
   G. How will I assess student progress?

7. Develop a management system for the center:
   A. What alternatives do I have for a management system?
   B. Is my management system appropriate for the age and ability of the children?
   C. Does the management system facilitate easy record keeping?
   D. How will I build in conference time? On-the-spot assistance, questioning, etc.?
   E. How will I schedule use of the center?

8. Set up the center:
   A. Is it attractive?
   B. Are the materials and activities easily accessible?

9. Introduce the center:
   A. Are the children well informed about the purposes, procedures, and management of the center?
   B. Will role playing provisions be included in the center?
   C. Are the rules for behavior clear?
   D. Do the children know what to do in the center?

While the above questions focus on planning and implementation of centers, they can also be used in formative (on-going) and summative (final) evaluation of center effectiveness.

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Classroom Management

Classroom Management is concerned with the personal (children and teacher), the physical (space, equipment, materials), the social (interrelationships), and time (scheduling, planning) elements of the classroom environment. "...proper preparation and execution of the early childhood environment minimizes disruptive behavior and supports positive interactions." When the classroom is rich in emotional and social supports, children are able to develop their social understandings of themselves, others, and their world. Children who learn, discover, create, and grow in such an environment are developing self-discipline. This is the ultimate aim of the early childhood educator--to teach children to be internally disciplined individuals. She/he creates an environment of discipline." (Leatzow, Neuhauser, Wilmes)

Behavioral Characteristics of the Kindergarten Child

In order to have an effective program for kindergarten children, teachers must take into consideration the behavioral characteristics of the children. First of all, they learn best when they are actively involved and allowed to use all of their senses in their work. They like to talk and the topic of conversation is usually ego-centered, focusing on happenings at home, pets, hobbies, and favorite television shows. They ask innumerable questions, and like to use new, large, and colorful words. Fives are not able to sit for long periods of time. They are still very creative and highly imaginative, but some are beginning to distinguish between fact and fantasy. They like to take part in group planning, when they can use their decision making skills. Kindergarten children learn in different ways; therefore, activities must be varied, using many different materials and approaches to meet the needs of all the children.

Environmental Influences

Environmental influences outside the classroom have an impact on what happens at school. Just as parents need to know what teachers are trying to accomplish and how they are going about it, teachers need to know what is going on in the home that affects the child's growth and development. A crisis at home, or a joyous event may affect the child's behavior at school. Health problems or medications may have an influence. The child's birth order place in the family, and relationships with other children in the home and neighborhood can be factors to consider.

The physical appearance of the classroom can affect behavior. If it is not appealing to the eye and does not arouse interest, the child may not become involved. In planning the classroom environment, the various modes of learning styles should be taken into account, so that all children will be able to learn in the style that is best for them. The four basic elements that affect children's learning styles are:

1. Environmental Elements: Sound, Light, Temperature, and Design. Some children require silence when they are concentrating, while others can block out noise and distractions. Then there are those who learn best in noise. Children also need different light areas, for some learn best in bright light and others in dim light.
2. Learning Style: Learning alone, with peers, with an adult, as well as the primary avenues of receiving information should be considered when formulating teaching techniques.

3. Psychological Elements: **Global/Analytic**, Hemispheric Preference, and Impulsive/Reflective.
   The analytic approach is when children learn sequentially, step by step. The global approach is when the child must be given an overall view before she/he can begin to focus on the activity. Hemispheric preference is when a student used his left brain or right brain more than the other.
4. Physical Elements: Perceptual Strengths, Intake, Time of Day, and Need for Mobility (Dunn)

Techniques for Classroom Management

Group Size and Room Arrangement

The size of the group has an impact on the management of the class. Ideally, 18 to 22 children is a good number. There should not be more than 24 in a class with one teacher. There should be space for moving about into both large whole-group activities such as rhythms and games and a variety of small group and individual work centers. It is recommended that 35 to 40 square feet of space be provided for each child.

A room for kindergarten should be arranged to allow for both noisy, active areas, and quiet zones. Thought should be given to traffic patterns and how persons and groups will move about within the space. It should be arranged into distinct learning areas with clear limits as to their uses. The wall, floor, and upper areas of the room can be used and should be considered when setting the stage for learning. Some of centers within the room are discussed in the following paragraphs.

The creative art center is where an easel, paints, crayons, markers, paste, clay, glue, collage materials, pencils and various kinds of papers are available to be used as the child may choose. Accessible storage for these materials is needed so that children may help to clean up and put away supplies.

An area in the classroom with storage for manipulatives is necessary to provide for small muscle development and eye-hand coordination exercise. Mathematics, part-whole and completion concepts can be learned here also. Puzzles, board games, small table blocks and construction sets, and beads to string are common to this area.

A block center with large hollow blocks and/or hardwood unit blocks with accessories (trucks, cars, people and animal figures) should be included. Blocks are useful in learning arithmetic, social science, physical science, and reading as signs may be made to designate buildings and traffic patterns. Work in the block center fosters social and emotional growth as well. Adequate storage is necessary so that the children can stack the blocks on the shelves in order, thereby learning to classify and sort by size and shape.

The language center can be stocked with books, a flannel board with story telling figures, and a record player and/or tape recorder with stories with which to listen. A comfortable rug or cushions invite children to "read." The children's own stories can be made into books and placed on the shelves here also.

A science center contains nature objects, pets, plants, scales, magnifying glasses, magnets and other simple science equipment. These should be changed frequently to stimulate interest.

A dramatic play center may be arranged as a home setting, but may become an office, store, restaurant, hospital or beauty shop as the unit in progress requires. Simple costume items and props may be provided to add realism to the setting.

Other centers developed include: water, sand, cooking, woodworking or music. When interest wanes, or the teacher plans to introduce a new emphasis, one center may be substituted for another, allowing the space to be used for a variety of purposes during the year.

Movable shelves, cabinets, and screens can be placed at right angles to the wall to set apart areas and define the limits of an activity. Tape on the floor can direct traffic and mark limits. Lighting should be adequate for each area. If the class is to be seated in a group for story time or other group activity, be sure that the class is not facing a window. The light makes it difficult for the children to focus on the book, or any visual aid, as it will be silhouetted.

Children can use chairs and tables for work, but sometimes the floor is a good place for a small group or an individual to work. An area rug or small rug samples can be comfortable places to sit for story time.

When the room is arranged, the teacher should sit at the child's eye level and visualize the response a child would likely have. Is it inviting? Does it look as if it is organized for purposeful activity? After trying an arrangement, if it does not work out as planned, the teacher should analyze the experience, and use this to guide him/her in making changes.

Scheduling and Planning

When planning for the use of time in the kindergarten, the children's need to move about and their inability to sit for long periods must be taken into account, as well as their need to be involved with concrete objects and experiences. Teacher-direct, whole-group activities should have flexibility planned into them, so that a "time-stretcher", a finger play, a relaxation exercise, or some other kind of break can be used when needed. It may be more productive to have several short sessions with a concept rather than a lengthy one. There should be a time scheduled when children choose their activity and work at their own pace. Active and quiet periods should be alternated.

Each day will include a rest time, a snack, a time to clean up, and time for sharing and evaluation. A full day program will have a more flexible routine with a longer rest period as the children are not as receptive to learning in afternoon without a break from routine.

For each objective that is chosen, alternate methods of accomplishing it should be selected. If the teacher finds that his/her primary method is not successful with all the children, an alternate method can be used. It is best to have a number of activities planned and not to utilize some of them than to be in a situation where an alternative is needed but has not been developed.

When those responsible (teachers and administrators) for the environment, planning, management, and overall atmosphere of the kindergarten classroom have a thorough understanding of the needs of the kindergarten child, many behavior problems will be prevented. If the teacher has positive expectations, giving attention to every evidence of growth in self-discipline, and celebrates with the children when achievements are noted, growth toward self-control is fostered in daily classroom life.

Alternative Ways of Managing the Hard-to-Manage Child

Children test situations through disruptive behavior. This is considered a normal part of human development as one grows to become independent and is struggling for an identity.

The teacher handles disruptions everyday. Sympathy and a sense of firmness are necessary while meeting the anxiety and aggression of a frustrated youngster.

The teacher should be prepared with a workable plan of meeting the frustration of the disruptive child. Serving as a positive model, maintaining clear and reasonable expectations, and accepting the child's need to assert himself are three simple guides to follow.

Situations and children's behavior are not always simply managed. What then? In order to understand and design a management plan for a hard-to-manage child, the teacher must be knowledgeable about alternate methods of management techniques. It is impossible to prepare a list of cure-alls or solutions for difficult situations in advance. A list of general suggestions follows.

1. Stand back and try to assess the entire situation. Make notes and document the situation. Determine if a pattern exists.
2. In a non-threatening situation, allow the child the opportunity to play-out his feelings with the teacher and/or classmates. Dolls and puppets may be of benefit.
3. Confer with parents to determine how disruptive behavior is handled at home. Work to establish rapport with the parents. Develop a communication system with them. It may be of benefit for the child to know that the teacher and his parents want to work together with him.
4. Develop a system of reward for good behavior and punishment for misbehavior. Explain the system to the child, parents, and (if necessary) other students.
5. Seek outside consultation. Some situations exist that are out of a teacher's control. Serious problems develop when an untrained person attempts to assume the role of a psychologist. Know how to make referrals. Maintain professional ethics when discussing students with another professional.

Instructional Methods and Activities to Teach Self Discipline

Discipline allows students to gain self-control. Two factors which impact the child's school and life performance are taking responsibility for their actions and establishing a sense of worth. One aspect of teaching is to ensure that daily opportunities are present that will promote both.

Learning centers can be planned to accomplish a particular purpose. The purpose must be clear, the activities to be performed planned, the materials needed provided, and a method of evaluation decided upon. For example, if the objective is for the child to associate numerals with numbers, objects to be counted (cubes, pegs, beans, buttons, etc.) could be placed in a center with rubber or cardboard numerals to be matched with the counted objects. Instructions may be given orally, and the teacher or aid could help the child check his work. At other times, instructions may be given with pictures or drawings. As reading abilities develop, simple printed instructions can be used.

Transition times need to be planned. Children have been shown to spend from 20 to 35 percent of the day in transition from one activity to another. (Leatzow, Neuhauser and Wilmes) Therefore, it is important to make maximum use of this time. Children need time to smoothly move from one activity to the next, so advance warning should be given before a change takes place. Various techniques can be used to move the group gradually. For example, "All those who have blue on their shoes walk to the circle for story time." or, "Everyone who had an egg (toast, juice, cereal, no breakfast, etc.) come to the door." Imaginative ways to move, such as quiet as a kitten, hopping like a bunny, or stealthy as an Indian hunting deer can be used. If a group must wait, a finger play, favorite story, a guessing game, or song can be used to ease boredom and minimize the possibility of pushing, jostling and other undesirable interactions.

Choosing Activities

Learning activities for the kindergarten should be challenging for each individual child and allow for each to experience success. Variations in learning styles and development call for a selection of different kinds of opportunities to master a skill or a concept. Exhibiting behavior that may be disruptive may be a child's way of registering inability to cope with what is expected. Six-year-olds usually have better control of both large and small muscles than do five-year-olds. This improved coordination increases their success and ease in doing pencil and paper tasks. Five-year-olds may still need to experiment with materials through art and drawing and other eye-hand coordination activities. By providing a selection of activities and monitoring development, all children can experience success. Centers can be set up to further the mastery of identified skills if needed.

The language arts are taught as children listen, express their own ideas, communicate with each other and the teacher, enjoy books and stories they have heard. All children can cooperate and write experience charts and tell stories, each making a contribution and appreciating the contribution of others.

Children are constantly interacting with the world of shapes, sizes, numbers, and relationships. They come to kindergarten with various quantitative concepts. Learning street addresses, telephone numbers, how old they are, measuring objects, and using the calendar can be the foundation for further math activities. Graphs can be made of some of the concrete experiences that include the children, such as how many persons in the family, what colors they are wearing, what time they get up, or how many clocks in each home. An abacus, scales, dominoes, peg boards, and a flannel board with figures and numbers can be used. Learning to group people and objects to various criteria can be used in both small and large groups. Songs and stories which emphasize number can be enjoyed as the children learn.

A child must respect himself or herself before she/he can control her/his behavior. Teachers should avoid humiliating a child by calling names, threatening, or expecting too much. Emphasis should be placed on desired behavior. In other words, "Catch'em being good!"

Katherine Read's Guide to Speech and Action

In Speech

1. State suggestions or directions in a positive rather than a negative form.
2. Give the child a choice only when you intend to leave the choice up to him.
3. Your voice is a teaching tool. Use words and a tone of voice which will help the child to feel confident and reassured.
4. Avoid trying to change a behavior by methods which may lead to loss of self-respect, such as shaming or labeling a behavior "naughty", "selfish."
5. Avoid motivating a child by making comparisons between one child and another or by encouraging competition.
6. Redirect the child by suggesting an activity that is related to his own purposes or interests whenever possible.
7. The effectiveness of a suggestion or a direction may depend largely on its timing.

In Action

8. Avoid making models in any art medium for the children to copy.
9. Give the child the minimum of help in order that he may have the maximum chance to grow in independence, but give help when the child needs it.
10. Make your directions effective by enforcing them when necessary.
11. Forestalling is the most effective way of handling problems. Learn to foresee and prevent rather than mop-up after a difficulty.
12. When limits are necessary, they should be clearly defined and consistently maintained.
13. Be alert to the total situation. Use the most strategic positions for supervising.
14. The health and safety of the children are a primary concern at all times.
15. Observe and take notes; increase your own awareness of what goes on.

Activities to Promote Good Self Concept

Title: Mirror

Materials: Construction paper cut in the shape of hand mirrors, aluminum foil, glue, and colors

Purpose: To recreate appropriate facial characteristics (eye color, hair color, teeth, and distinguishing marks)

Procedure: Given the materials listed above, students are instructed to secure the mirror (circular piece of aluminum foil) in the holder (construction paper) by using the glue. Students are then instructed to close their eyes and pretend that they are looking into a magic mirror. When they open their eyes, they are asked to turn the mirror over and draw a picture of themselves looking into the mirror. As the students are working, the teacher walks around the group and interacts with the students by asking lead questions about their attractive faces. The teacher explains that

each student will be looking at himself/herself and discovering wonderful things.
NOTE- The mirrors may be re-used with the teacher leading the students in guided fantasies or visual imageries.

Title: Unfinished Sentences

Purpose: To express feelings about themselves

Procedure: This activity can be conducted at sharing time, snack time, or while the groups are working on projects. The teacher merely starts a sentence and asks the students to finish it. The students are reminded that there is no wrong answer. The sentence stems may be as follows:

I feel good when . . .
When I grow up I want to . . .
I feel sad when . . .
My favorite color is . . .
I like it when my mama says . . .
I like to go to . . .

Title: "All About Me" Booklet and Tape

Materials: Paper, yarn, colors, magazines, scissors, paste, cassette tape, and a tape player

Purpose: To create an illustration about important aspects of their lives.
To express feelings about themselves.

Procedure: For several days time is set aside to work on these books. (See Math Section.) Students may wish to describe their families, favorite foods, favorite pastimes, pets, friends, and homes. In addition, students may have an opportunity to visit the "recording studio". The teacher will have a tape for each child and will record their responses to specific questions concerning themselves. Students will have the opportunity to sing, tell a story, or ask questions on the tape. This can be an ongoing activity. Responses to activities throughout the year can be recorded. What a wonderful end-of-the-year product with long range appeal!

Finger Plays

Johnny works with one hammer, one hammer, one hammer.
(Pounding motion with one fist)
Johnny works with one hammer then he works with two,
(Pounding motion with both fists)
Johnny works with two hammers, two hammers, two hammers,
Then he works with three,
(Pounding with both fists and one foot)
Johnny works with three hammers, three hammers, three hammers,
Then he works with four,
(Both feet and both fists)
Johnny works with four hammers, four hammers, four hammers,
Then he works with five,
(Add head nodding)
Johnny works with five hammers, five hammers, five hammers,
Then he goes to sleep.
(Head on folded hands, eyes closed)

Roll your arms slowly (Arms bent at elbows, circling one another
Slowly as can be
Roll your arms slowly, and fold your arms like me. (Fold arms to chest)
Roll your arms quickly, quickly as can be,
Roll your arms quickly, and fold your arms like me.
Clap your hands softly, softly as can be,
Clap your hands softly, and fold your arms like me.
Clap your hands loudly, loudly as can be,
Clap your hands loudly, and fold your arms like me.
Nod your head lazily, lazily as can be,
Nod your head lazily, and shut your eyes like me.
Wake up, wake up brightly as can be,
Wake up and give one clap like me.

We touch our toes; we touch our knees
We reach up to the sky. We touch our toes;
We touch our knees, and then we clap up high!
And then sit down without a sound.

Relaxation Exercise

"One way to help children develop a sound understanding of relaxation as opposed to tension is to explore some of the words that are used to describe feelings of tension and the release of tension. You can lead the children in whole body movements while sitting on the floor.

Tense	Relaxed
tight	loose
stiff	limber
hard	soft
rigid	flexible
rough	gentle
tense	relaxed

Say:
Be the tighest person in the world. (Pause) Now be the loosest person in the world. (Pause)

Pretend the floor is the hardest thing you've ever sat on. (Pause) Now pretend it's the softest thing you've ever sat on. (Pause) So Soft.

Rub the back of your hand as roughly as you can. (Pause) Now rub it as gently as you can. (Pause)
Continue in this fashion." (Think of something quiet)

Rhythmic Chants

These can be used to set a rhythm as children move. Make your voice distinctly accent the beat to get a regular rhythm going.

Walking
Hear the beat, beat
of the feet, feet, feet
Of the children as they walk
In the street, street, street.

Hear the boom, boom, boom
And the boom, boom, boom
Of the children as they walk
In the room, room, room.

Tiptoeing
Lightly, lightly, tiptoe,
Not a single sound,
Lightly, lightly, tiptoe
Gently move around.

Creepity-creep, creepity-creep,
Shush, shush, shush, shush,
There's a great big secret to keep.

Hopping
Hop, hop, hop
Turn to the right and
Turn to the left and
Change your feet with a
Hop, hop, hop.

Skipping
A-skippity skip and a-skippity skip,
A hippity-hop and a hippity-hip,
One knee up and one knee down,
We go skipping around and around.

Swinging, Swaying
Day and night, night and day
The clock is ticking time away.
Tick-tock, it's one o'clock,
Tick-tock, it's two o'clock.

Completion of Task

Five-year-old can offer great assistance in completing daily classroom maintenance tasks. The child's need to be needed and the desire to excel can be nurtured beautifully by the development and day to day use of a helper chart. The chart consists of coded symbols that represent tasks to be completed daily by the students. The students' names are posted each day beside their specific jobs. These jobs may consist of feeding the hamster, watering or turning the plants, placing the date on the calendar, telling the weather, helping the snack, holding the flag, leading the pledge of allegiance, feeding the fish, checking to make sure all of the centers are straight before leaving, being line leader, and turning out lights.

These tasks are rewarding experiences for the youngsters. They truly feel a part of the program and take pride in their jobs. This pride is easily transferred to learning situations and serves as an intrinsic motivating factor in the continued desire to complete the tasks assigned.

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Resource Books

Finger Frolics, compiled by Liz Cromwell and Dixie Hibner, Distributed By Gryphon House, 3706 Otis Street, P. O. Box 217, Mt. Rainier, Maryland 20822, 1983, $8.95. This is a good collection of seasonal, self concept, holiday, and unit theme finger plays.

Think of Something Quiet, by Clare, Cherry, Pitman Learning, Inc., 6 Davis Drive, Belmont, CA 94002, 1981.

Subtitle "A Guide for Achieving Serenity in Early Childhood Classrooms," this book contains many ideas for dealing with stress and tension. There are relaxation exercises and techniques, games and activities included.

Creating Discipline in the Early Childhood Classroom, by Nancy Leatzow, Carol Neuhauser and Liz Wilmes, Brigham Young University Press, Provo, Utah, 1983, $9.95.

The All Year Long Songbook, compiled by Rosly Rubin and Judy Wathen, Scholastic Book Services, 50 West 44 Street, New York, N. Y. 10036, 1980, $7.95. This includes familiar songs for seasonal use of all year long and has a section of finger plays set to music.

A Very Practical Guide to Discipline with Young Children, by Dr. Grace Mitchell, available from Gryphon House, Inc., P. O. Box 275, Mt. Rainier, MD 20712, 1982, $8.95. Dr. Mitchell proposes a plan to lead to self-discipline and uses actual life situations to illustrate.

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